# INTERNATIONAL PETROLEUM STATISTICS REPORT

## **March 1998**



**Energy Information Administration Energy Markets and Contingency Information Division** 

## **Preface**

The <u>International Petroleum Statistics Report</u> is a monthly publication that provides current international oil data. This report is published for the use of Members of Congress, Federal agencies, State agencies, industry, and the general public. Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95-91 (Section 205(a)(2)) that states:

"The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze and disseminate data and information ..."

The <u>International Petroleum Statistics Report</u> presents data on international oil production, demand, imports, and stocks. The report has four sections. Section 1 contains time series data on world oil production, and on oil demand and stocks in the Organization for Economic Cooperation and Development (OECD). This section contains annual data beginning in 1985, and monthly data for the most recent two years. Section 2 presents an oil supply/demand balance for the world. This balance is presented in quarterly intervals for the most recent two years. Section 3 presents data on oil imports by OECD countries. This section contains annual data for the most recent year, quarterly data for the most recent two quarters, and monthly data for the most recent twelve months. Section 4 presents annual time series data on world oil production and oil stocks, demand, and trade in OECD countries. World oil production and OECD demand data are for the years 1970 through 1996; OECD stocks from 1973 through 1996; and OECD trade from 1986 through 1996.

Data for the United States are developed by the Energy Information Administration's (EIA) Office of Oil and Gas. Data for other countries are derived largely from published sources, including International Energy Agency publications, the EIA International Energy Annual, and the trade press. (See sources after each section.) All data are reviewed by the International Statistics Branch of EIA. All data have been converted to units of measurement familiar to the American public. Definitions of oil production and consumption are consistent with other EIA publications.

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Historical revisions reflect changes to data that were published in the *International Energy Annual 1996*, which is also available on the EIA Home Page (http://www.eia.doe.gov/emeu/iea/contents.html).

## Oil Market Chronology -- February 1998

The following chronology lists international events of potential significance for world petroleum markets. Sources include: Dow Jones (DJ), the New York Times (NYT), the Washington Post (WP), and the Wall Street Journal (WSJ).

## February 1

A U.S. federal judge denies a preliminary injunction requested by civil rights lawyers that would have removed California-based Unocal Corporation from a \$1.2 billion pipeline project in Burma. The lawsuit alleges a variety of human rights violations by the Burmese government in connection with the project. The judge's ruling states that prohibiting Unocal's participation in the project would not stop the human rights abuses claimed in the lawsuit. President Clinton imposed trade and economic sanctions on Burma in April 1997, but the ban did not affect existing investments. Unocal holds a 28 percent share in the pipeline project, which is being constructed from Burma to Thailand. (DJ)

United Nations (U.N.) Secretary-General Kofi Annan calls for an increase in the amount of oil Iraq can sell under the U.N.-sponsored oil-for-food program. Annan recommends raising the sales limit from \$2.14 billion every six months to \$5.2 billion. The recommendation now moves to the U.N.'s 15-member Security Council for approval. (WP)

## February 2

Western partners in the Caspian Pipeline Consortium have frozen funds for a \$2 billion pipeline and are pushing for a shake-up in the Consortium's Russian-led management. The 900-mile pipeline will eventually transport 1.4 million barrels of oil per day from Kazakhstan's Tengiz oil field through Russia to the Black Sea port of Novorossiysk. Oil shipments were scheduled to begin in late 1999, but will likely be delayed at least one year as a result of this latest development. Continued funding of the project was contingent upon the Consortium obtaining Russian rights of way and various federal and local permits for the pipeline by the end of 1997. During a meeting in December 1997, the Western partners discovered that much of this work had not been completed. (WSJ)

## February 3

Azerbaijan's state oil company Socar and U.S.-based Conoco announce an agreement to conduct a joint study of Azerbaijan's natural gas processing industries. The study will examine the commercial viability of gathering, processing, and transporting Azerbaijan's natural gas and natural gas liquids for export and domestic use. The study will be conducted over a period of six months. (DJ)

Russia's RAO Gazprom has sold its 10 percent stake in Centgas, a consortium set up to construct a \$2 billion Turkmenistan-Afghanistan-Pakistan natural gas pipeline. U.S.-based Unocal Corporation acquired 7 percent of Gazprom's shares, bringing its total stake in the Centgas to 54 percent. The remaining 3 percent went to Japanese-owned Indonesia Petroleum and Itochu, South Korea's Hyundai Engineering & Construction Company, and Pakistan's Crescent Group. The 800-mile pipeline will extend from the Daulatabad gas field in southeastern Turkmenistan through Afghanistan to Pakistan. (DJ)

#### February 4

General Motors and Amoco Corporation announce a groundbreaking partnership to jointly develop clean-burning motor vehicle fuels. The partnership is the first of its kind between an automaker and an oil company. General Motors Vice Chairman Harry Pearce says that cleaner diesel fuels and cleaner-burning reformulated gasoline are necessary for the success of future hybrid vehicles, which will run on a combination of gasoline and electricity. (WSJ) (DJ)

General Motors, Chrysler Corporation, and Ford Motor Company announce that they will participate in the Environmental Protection Agency's National Low Emission Vehicle Program. The Program requires automakers to build cars that will be 70 percent cleaner than current models. In exchange for the voluntary participation of the car companies, eight Northeastern states and the District of Columbia gave up the right to adopt higher California emissions standards. The automakers will begin producing the cleaner cars in 1999 in the Northeast and two years later in the rest of the country. Ten foreign automakers have agreed to participate as well, including Honda, Toyota, Nissan, BMW, Mercedes, Saab, Subaru, Suzuki, Volvo, and Rolls Royce. (NYT) (WP) (DJ)

## February 5

Following a ruling by a federal judge denying a request from environmentalists and Native Americans seeking to block the sale of the Elk Hills Naval Petroleum Reserve, the U.S. Department of Energy formally transfers ownership of the reserve to Occidental Petroleum Corporation. Occidental purchased a 78 percent interest in the field for \$3.65 billion. Chevron Corporation currently holds the remaining 22 percent. Elk Hills contains 450 million barrels of proven oil reserves; however, officials from Occidental believe the reserve may contain one billion barrels of recoverable reserves. (DJ)

## February 5

Norway's state oil company Statoil AS and its partners will invest \$400 million to expand the development of Venezuelan oil field LL 652. The investment will cover the first phase of the expansion designed to increase production from 10,000 barrels per day to 115,000 barrels per day over the next ten years. The field's recoverable reserves are estimated at 500 million barrels. Statoil and Chevron each hold a 30 percent interest in the project with Phillips and Atlantic Richfield each holding 20 percent. (DJ)

The United Kingdom's Hardy Oil & Gas announces the discovery of a major new natural gas field in the South West Miano concession onshore Pakistan. The exploration well Sawan-1, operated by Austria's OMV, produced a flow rate of 58 million cubic feet per day. Reserves are estimated at approximately 918 billion cubic feet. Commercial development is expected to begin in 1998, and initial production is to start by the end of 1999. Hardy and Pakistan Petroleum Limited each hold a 30 percent interest in the concession, with OMV holding a 25 percent interest. (DJ)

## February 6

Iraq rejects key parts of United Nations (U.N.) Secretary-General Kofi Annan's proposal to increase the amount of oil Iraq is permitted to sell under the U.N.'s oil-for-food program from \$2.14 billion to \$5.2 billion. In a letter to Annan, Iraqi Foreign Minister Mohammed Saeed al-Sahhaf objects to additional funds to pay for U.N. monitoring, proposals to repair electric power stations in northern Iraq, and plans for U.N. agencies to target aid to specific groups such as the poor and children. Al-Sahhaf writes that the Iraqi government should deliver the aid and determine which power stations are repaired not the U.N. (WP) (DJ)

## February 9

In a letter to United Nations (U.N.) Secretary-General Kofi Annan, Iraqi Foreign Minister Mohammed Saeed al-Sahhaf informs the U.N. that Iraq can only export up to \$4 billion of oil in six months. The letter is a response to Annan's recommendation to the U.N. to allow Iraq to increase the amount it can export under the oil-for-food program from \$2.14 billion to \$5.2 billion. In addition, al-Sahhaf writes that a larger share of the oil sales should go towards humanitarian aid, while the amounts funding U.N. programs and a compensation fund for Persian Gulf war victims should be reduced. (DJ)

Georgian President Eduard Shevardnadze escapes an assassination attempt as he is headed home in Tbilisi, Georgia's capital. This represents the second assassination attempt against him in three years. Shevardnadze is not injured, but two bodyguards are dead and four others seriously wounded. Shevardnadze suggests that the attack could have been related to his country's attempt to be part of a pipeline route transporting Caspian Sea oil to the Black Sea. (WP)

## February 10

The United Nations (U.N.) approves 34 oil contracts submitted by Iraq which will meet its \$2 billion quota under the third phase of the U.N.-sponsored oil-for-food program. The 34 contracts total 151.8 million barrels of oil. Iraq exported 121.1 million barrels during the first phase and 127.3 million barrels during the second. The increase in volume is due to weakening oil prices on international markets. (DJ)

President Fidel Ramos signs into law legislation deregulating the country's oil industry. It is the last major structural reform sought by the International Monetary Fund (IMF) before it allows the Philippines to withdraw from its current IMF borrowing program. The new law provides for a five-month transition period before full deregulation and a \$73 million buffer fund that can be used to subsidize certain petroleum products. (DJ)

Energy Africa Limited, a South African oil and gas exploration company, announces the discovery of oil off the coast of Congo about 10 miles southwest of the Nkossa oil field. The Bilondo Marine 1 well produced flow rates of 8,520 barrels of oil per day. The well also tapped into a different geological structure from Nkossa, proving the existence of a separate field. The discovery was made within the Haute Mer exploration permit which could contain estimated oil reserves of 500 million barrels. Energy Africa holds a 4 percent interest in a consortium that includes Elf Aquitaine (51 percent), Chevron (30 percent), and Hydro Congo (15 percent). (DJ)

## February 11

Russia's RAO Gazprom and Italy's ENI SpA sign a preliminary agreement for joint exploration and exploitation of the Astrakhan region in Russia. The Astrakhan fields are estimated to contain up to one billion barrels of oil equivalent. The deal is worth \$3 billion and includes ENI taking a yet-to-be-determined stake in Gazprom. In addition, the two companies envision joint ventures in other regions of the world, including Europe, the Mediterranean, and China. (DJ)

## February 16

The United Nations (U.N.) Iraq Sanctions Committee approves a pricing plan for Iraqi oil to be shipped under the third phase of the U.N.-sponsored oil-for-food program. The approval clears the way for Iraq to export \$1.07 billion of oil in each of two 90-day periods. The first 90-day period ends on March 5, 1998. (DJ)

- **February 17** A barge carrying about 200,000 gallons of diesel fuel sinks in rough seas off the coast of the United Arab Emirates. The barge is suspected of transporting smuggled fuel from Iraq. (DJ)
- February 18 United Nations (U.N.) Secretary-General Kofi Annan receives unanimous support from the U.N. Security Council for his diplomatic trip to Iraq. Annan is scheduled to meet with President Saddam Hussein and other Iraqi leaders in an attempt to reach a diplomatic solution to the standoff between Iraq and the U.N. over weapons inspections. (DJ)

The international environmental group Greenpeace praises a policy decision by the European Union (EU) Commission to ban the disposal of offshore oil and gas platforms at sea. The Commission also called on countries in the Ospar Convention to adopt the same policy. The Ospar Convention regulates marine pollution in the North East Atlantic from Gibraltar to the Arctic. The policy, which carries an exemption for large concrete platforms, still requires approval from EU foreign ministers. The ministers will address the policy at a Ministerial meeting on July 20-24, 1998. (DJ)

- The U.S. Justice Department intervenes in four lawsuits against DuPont Company's Conoco Unit, Royal Dutch/Shell Group's Shell Oil Company, Burlington Resources, and Amoco Corporation. The companies are accused of violating the False Claims Act by knowingly underpaying royalties to the U.S. government and Indian nations for oil extracted from public and Indian lands. No estimate of the value of the underpayments has been released, but a Justice Department attorney says that, since 1988, the companies had undervalued hundreds of millions of barrels of oil taken from the Gulf of Mexico and western states. (NYT) (WSJ)
- The United Nations (U.N.) Security Council votes unanimously to more than double the amount of oil Iraq can export under the U.N. oil-for-food program. The Security Council's vote increases the amount Iraq can export from \$2.14 billion to \$5.26 billion over six months. Iraq maintains that it only has the capability to export up to \$4 billion over a six-month period. (DJ)
- Sudan signs a \$600 million agreement with three foreign companies to construct a 994-mile pipeline to carry oil from the western fields of Higlig to Bashair Port, near Port Sudan on the Red Sea. The pipeline will transport 150,000 barrels per day and is expected to be operational by June 1999. The Sudanese government's partners are China's CPECC Oil Company, Argentina's Techint, and Britain's Weir and Allan Diesel (DJ)

United Nations (U.N.) Secretary-General Kofi Annan reaches an agreement with senior Iraqi officials over U.N. inspections of suspected Iraqi weapons sites. The deal includes opening eight Iraqi presidential compounds to weapons inspectors, one of the major points of contention between Iraq and the U.N. Annan will now present the agreement to the U.N. Security Council for approval. (WP)

Amerada Hess Corporation of the U.S. signs two production-sharing contracts with Malaysia's Petronas Carigali, marking Amerada Hess' entry into exploration activities in Malaysia. The contracts give Amerada Hess a 70 percent stake in block PM304 offshore Terengganu and an 80 percent stake in block SK306 offshore Sarawak. Amerada Hess has committed to spending \$24.9 million and drilling five well on the two blocks. (DJ)

Japan's Export-Import Bank signs a loan agreement worth approximately \$80 million with Gas Authority of India Limited to help finance capacity expansion work on a natural gas pipeline linking Gujarat, Madhya, and Uttar provinces with the Bombay North oil and gas field. The loan is being co-financed by the Asian Development Bank. The loan will be used to boost the capacity of the pipeline from 636 million cubic feet per day to 1.2 billion cubic feet per day. (DJ)

- Turkmenistan and Shell Exploration B.V. sign a Memorandum of Understanding (MOU) providing Shell with the exclusive right to promote a project to transport Turkmen natural gas to Turkey. As part of the MOU, Shell will conduct a feasibility study on a proposed 1,200-mile gas pipeline connecting Turkmenistan and Turkey via Iranian territory. (DJ)
- State oil company Petroleos de Venezuela (PdVSA) announces that three major Venezuelan oil joint ventures will be delayed 6-8 months due to budget cuts.

  Lower-than- expected oil prices have forced PdVSA to cut its investment plan for 1998 by approximately \$1 billion. The three projects are the Cerro Negro joint venture with Mobil Corporation, the Total-led Sincor project in the Zuata region, and the Arco-led Petrolera Ameriven S.A. joint venture in the Hamaca zone. All three are extra-heavy crude upgrading projects in the Orinoco Belt region in southeast Venezuela. (DJ)

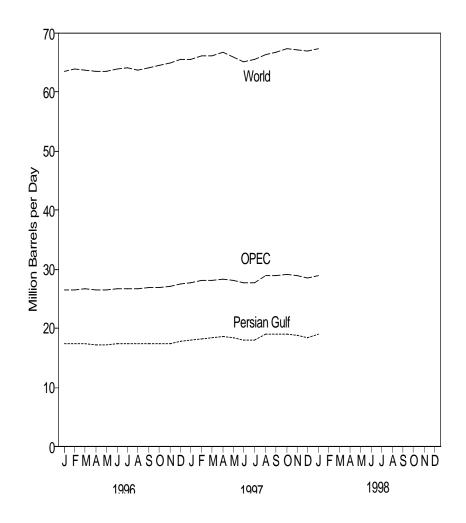
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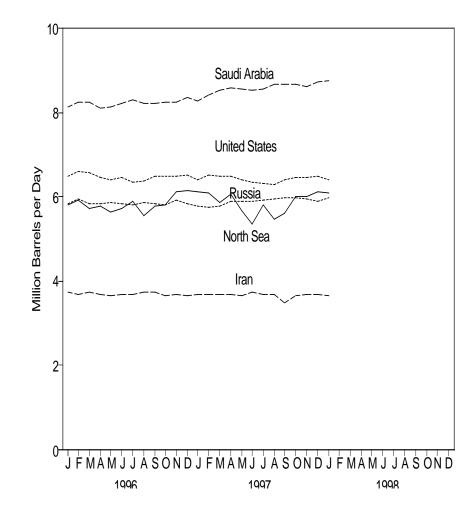
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1. Annual and Monthly Oil Data



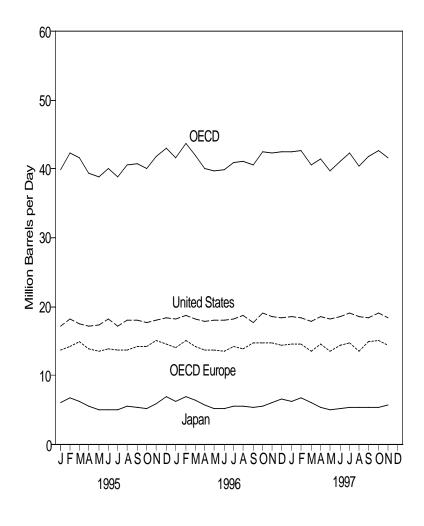
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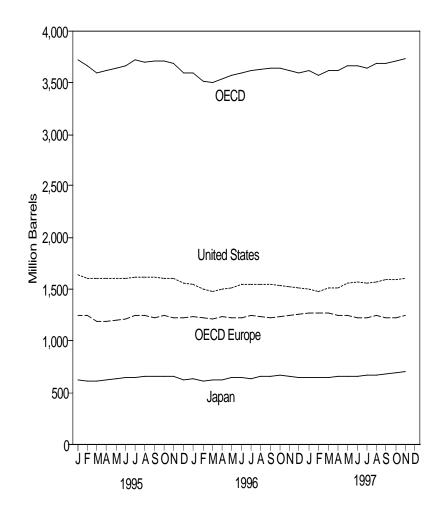
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Figure 3. OECD Oil Consumption, Monthly

Figure 4. OECD Oil Stocks, Monthly



Source: Table 1.7



Source: Table 1.5

Table 1.1a World Crude Oil Production (Including Lease Condensate), 1985-Present (Thousand Barrels per Day)

	Algeria	Indo- nesia	Iran	Iraq	Kuwait <u>1</u> /	Libya	Nigeria	Qatar	Saudi Arabia <u>l</u> /	United Arab Emirates	Vene- zuela	Total OPEC
1985 Average	1,037	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,18
1986 Average	945	1,390	2,035	1,690	1,419	1,034	1,467	308	4,870	1,330	1,787	18,27
1987 Average	1,048	1,343	2,298	2,079	1,585	972	1,341	293	4,265	1,541	1,752	18,51
1988 Average	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,32
1989 Average	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,07
1990 Average	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,19
1991 Average	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,27
1992 Average	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,39
1993 Average	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,11
L994 Average	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,51
1995 Average	1,202	1,503	3,643	560	2,057	1,390	1,993	R442	8,231	R2,233	2,750	R26,00
L996 Average	1,242	1,547	3,686	R579	2,062	1,401	2,188	510	8,218	2,278	3,053	R26,76
1997 January	1,260	1,570	3,685	1,085	2,085	1,430	2,280	585	8,265	2,300	3,190	27,73
February	1,270	1,590	3,685	1,125	2,077	1,430	2,310	585	8,408	2,330	3,190	28,00
March	1,280	1,600	3,685	1,175	2,105	1,440	2,240	585	8,515	2,360	3,200	28,18
April	1,280	1,560	3,685	1,275	2,107	1,450	2,310	585	8,568	2,360	3,220	28,40
May	1,280	1,580	3,635	1,325	2,027	1,450	2,270	605	8,548	2,210	3,240	28,17
June	1,260	1,530	3,735	605	2,050	1,450	2,340	690	8,540	2,325	3,260	27,78
July	1,280	1,530	3,685	605	2,070	1,450	2,330	685	8,560	2,325	3,270	27,79
August	1,280	1,530	3,685	1,515	2,070	1,450	2,350	685	8,660	2,325	3,390	28,94
September	1,280	1,490	3,485	1,735	2,075	1,450	2,300	685	8,665	2,325	3,430	28,92
October	1,280	1,490	3,635	1,625	2,075	1,450	2,400	685	8,665	2,325	3,430	29,06
November	1,280	1,540	3,685	1,390	2,075	1,450	2,360	705	8,615	2,305	3,460	28,86
December	1,290	1,540	3,685	781	2,175	1,450	2,320	705	8,725	2,310	3,490	28,47
1997 Average	1,277	1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,36
1998 January	1,290	1,520	3,635	1,261	2,215	1,450	2,208	715	8,765	2,435	3,440	28,93

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In January 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 530 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. •Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Table 1.1b World Crude Oil Production (Including Lease Condensate), 1985-Present (Thousand Barrels per Day)

	Norway	United Kingdom	North Sea <u>1</u> /	Angola	Argen- tina	Austra- lia	Brazil	Canada	China	Colombia	Ecuado
1985 Average	788	2,530	3,417	231	460	575	564	1,471	2,505	176	281
1986 Average	870	2,539	3,547	282	434	520	572	1,474	2,620	305	293
1987 Average	1,022	2,406	3,584	360	428	547	566	1,535	2,690	385	174
1988 Average	1,158	2,232	3,540	452	449	538	554	1,616	2,730	378	302
1989 Average	1,554	1,802	3,515	455	460	490	596	1,560	2,757	403	279
1990 Average	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average	3,104	2,568	5,822	709	756	570	795	R1,837	3,131	623	R396
1997 January	3,268	2,693	6,126	700	820	565	840	1,874	3,210	650	385
February	3,263	2,660	6,074	715	820	561	830	1,920	3,240	640	385
March	3,063	2,638	5,863	720	830	594	830	1,900	3,215	620	380
April	3,388	2,515	6,063	720	840	594	830	1,823	3,230	650	390
May	3,194	2,315	5,677	720	840	576	830	1,737	3,275	650	380
June	3,025	2,135	5,339	710	815	574	830	1,835	3,220	640	360
July	3,194	2,447	5,820	715	820	584	860	1,889	3,190	605	360
August	2,890	2,407	5,462	720	840	605	845	1,895	3,190	635	370
September	2,927	2,483	5,589	717	845	626	830	1,930	3,195	660	390
October	3,209	2,610	6,000	725	850	616	R740	1,956	3,195	715	385
November	3,192	2,602	5,992	725	850	565	830	1,970	3,158	745	R395
December	3,229	2,700	6,116	750	R845	R590	830	1,985	3,090	R730	R390
L997 Average	3,153	2,517	5,843	720	835	R588	R827	1,893	3,200	R662	R381
1998 January	3,293	2,597	6,082	760	845	528	830	1,912	3,240	750	390

 $<sup>\</sup>underline{1}/$  North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.  $\overline{R}$ =Revised data.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Table 1.1c World Crude Oil Production (Including Lease Condensate), 1985-Present (Thousand Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <u>1</u>	World
1985 Average	887	172	620	440	2,745	498		11,585	178	8,971	2,124	53,982
1986 Average	813	166	630	504	2,435	560		11,895	194	8,680	2,166	56,227
1987 Average	896	155	609	497	2,548	582		12,050	230	8,349	2,120	56,666
1988 Average	848	159	635	540	2,512	617		12,053	265	8,140	2,235	58,737
1989 Average	865	208	700	585	2,520	641		11,715	340	7,613	2,249	59,863
1990 Average	873	270	660	619	2,553	685		10,975	388	7,355	2,253	60,566
1991 Average	874	294	615	646	2,680	700		9,992	492	7,417	2,274	60,207
1992 Average	881	298	561	653	2,669	740	7,632		481	7,171	R3,228	R60,212
1993 Average	890	313	534	640	2,673	776	6,730		554	6,847	R3,280	R60,238
1994 Average	896	329	590	645	2,685	810	6,135		560	6,662	R3,382	R60,992
1995 Average	920	R365	703	682	2,618	851	5,995		R575	6,560	R3,410	R62,331
1996 Average	922	368	651	695	2,855	883	R5,850		604	6,465	R3,509	R64,054
1997 January	885	370	650	730	2,940	890	5,789		565	6,387	3,706	65,652
February	885	370	650	730	2,970	900	5,729		565	6,514	3,685	66,031
March	890	370	660	730	2,970	900	5,772		565	6,470	3,725	66,027
April	890	370	685	750	2,945	900	5,893		560	6,483	3,747	66,603
May	880	370	685	750	2,990	890	5,902		560	6,401	3,711	65,825
June	870	370	685	740	3,005	900	5,902		560	6,341	3,716	65,018
July	880	370	685	740	3,035	840	5,923		560	6,316	3,670	65,473
August	870	370	685	740	3,080	870	5,945		560	6,282	3,663	66,402
September	860	360	675	760	3,105	870	5,958		560	6,388	3,664	66,723
October	860	370	678	760	3,087	880	5,954		560	6,435	3,678	R67,323
November	860	370	681	760	3,085	890	5,945		560	6,450	R3,714	R67,212
December	860	R360	R675	760	R3,056	R910	5,893		560	R6,475	R3,691	R66,850
1997 Average	874	R368	675	746	R3,023	R887	5,884		561	R6,411	R3,698	R66,262
1998 January	860	360	675	760	3,085	910	5,979		560	6,390	E3,720	67,379

<sup>1/</sup> Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

<sup>-- =</sup> Not applicable. R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Table 1.2 OPEC Crude Oil Production (Excluding Condensate), 1985-Present (Thousand Barrels per Day)

	Algeria	Indo- nesia	Iran	Iraq	Kuwait <u>1</u> /	Libya	Nigeria	Qatar	Saudi Arabia <u>1</u> /	United Arab Emirates	Vene- zuela	Total OPEC
1005 3		1 101	0.050	1 422	1 002	1 050	1 485	201	2 200	1 122	1 550	15 502
1985 Average	702	1,181	2,250	1,433	1,023	1,059	1,475	301	3,388	1,133	1,558	15,503
1986 Average	600	1,257	2,035	1,690	1,419	1,034	1,447	308	4,870	1,270	1,645	17,575
1987 Average	648	1,189	2,298	2,079	1,585	972	1,291	293	4,265	1,441	1,587	17,648
1988 Average	640	1,177	2,240	2,685	1,492	1,175	1,400	346	5,086	1,465	1,715	19,421
1989 Average	690	1,231	2,810	2,897	1,783	1,150	1,666	380	5,064	1,783	1,747	21,201
1990 Average	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991 Average	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992 Average	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993 Average	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994 Average	750	1,334	3,600	548	2,034	1,378	1,887	409	8,147	2,183	2,542	24,812
1995 Average	767	1,343	3,608	550	2,057	1,390	1,876	449	8,231	2,197	2,710	25,179
1996 Average	812	1,367	3,651	579	2,062	1,401	2,051	475	8,218	2,198	3,013	25,826
1997 January	830	1,390	3,650	1,080	2,085	1,430	2,180	550	8,265	2,220	3,150	26,830
February	840	1,410	3,650	1,120	2,077	1,430	2,210	550	8,408	2,250	3,150	27,095
March	850	1,420	3,650	1,170	2,105	1,440	2,140	550	8,515	2,280	3,160	27,280
April	850	1,380	3,650	1,270	2,107	1,450	2,210	550	8,568	2,280	3,180	27,495
May	850	1,400	3,600	1,320	2,027	1,450	2,170	570	8,548	2,130	3,200	27,265
June	830	1,350	3,700	600	2,050	1,450	2,240	655	8,540	2,245	3,220	26,880
July	850	1,350	3,650	600	2,070	1,450	2,230	650	8,560	2,245	3,230	26,885
August	850	1,350	3,650	1,510	2,070	1,450	2,250	650	8,660	2,245	3,350	28,035
September.	850	1,310	3,450	1,730	2,075	1,450	2,200	650	8,665	2,245	3,390	28,015
October	850	1,310	3,600	1,620	2,075	1,450	2,300	650	8,665	2,245	3,390	28,155
November	850 850	1,360	3,650	1,385	2,075	1,450	2,260	670	8,615	2,245	3,420	27,960
December	860	1,360	3,650	776	2,075	1,450	2,220	670	8,725	2,225	3,420	27,566
	847	1,366	3,629	1,182	2,175	1,446	2,220	614	8,562	2,236	3,430	27,300
1997 Average	04/	1,300	3,029	1,102	2,003	1,440	2,21 <i>/</i>	014	0,302	4,430	3,4/3	4/,43/
1998 January	860	1,340	3,600	1,256	2,215	1,450	2,108	680	8,765	2,355	3,400	28,029

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In January 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 530 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>•</sup>Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Table 1.3 World Natural Gas Plant Liquids Production, 1985-Present (Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <u>1</u> /	Persian Gulf <u>2</u> /	OAPEC3/	OPEC3/	World
1985 Average	120	337	271	375		350	1,609	645	808	892	3,938
1986 Average	120	328	352	385		440	1,551	700	860	969	4,150
1987 Average	140	367	338	418		430	1,595	721	900	1,006	4,279
1988 Average	120	381	370	499		450	1,625	808	979	1,077	4,481
1989 Average	130	410	384	503		425	1,546	851	1,041	1,188	4,502
1990 Average	130	426	428	620		425	1,559	930	1,107	1,281	4,632
1991 Average	140	431	457	680		420	1,659	931	1,113	1,299	4,827
1992 Average	140	460	454	713	230		1,697	1,003	1,185	1,364	R4,975
1993 Average	145	506	459	704	220		1,736	1,040	1,238	1,435	R5,181
1994 Average	140	529	461	698	200		1,727	1,071	1,267	1,465	R5,293
1995 Average	145	581	447	701	180		1,762	1,106	1,301	1,506	R5,485
1996 Average	R150	R596	423	697	R185		1,830	1,082	R1,295	R1,501	R5,582
1997 January	145	660	370	700	R200		1,815	1,085	R1,287	R1,465	R5,595
February	145	645	375	710	R200		1,900	1,095	R1,297	R1,475	R5,660
March	145	652	385	720	R200		1,907	1,105	R1,307	R1,485	R5,694
April	145	610	360	725	R200		1,849	1,110	R1,312	R1,490	R5,566
May	145	597	380	725	R200		1,832	1,110	R1,312	R1,490	R5,508
June	145	595	370	720	R200		1,842	1,105	R1,307	R1,485	R5,487
July	145	598	370	720	R200		1,850	1,105	R1,307	R1,485	R5,524
August	145	625	370	730	R200		1,850	1,115	R1,317	R1,495	R5,548
September	145	626	425	730	R200		1,871	1,115	R1,317	R1,495	R5,651
October	145	646	409	730	R200		1,840	1,115	R1,317	R1,495	R5,641
November	145	655	405	725	R200		1,753	1,110	R1,312	R1,490	R5,601
December	145	665	R418	735	R200		R1,798	1,120	R1,322	R1,500	R5,678
1997 Average	145	631	R386	723	R200		R1,842	1,108	R1,310	R1,488	R5,596
1998 January	145	665	385	735	200		1,836	1,120	1,322	E1,500	5,669

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Excludes fuel ethanol blended into finished motor gasoline.

<sup>2</sup>/ See Appendix A for countries in this group.

 $<sup>\</sup>overline{3}$ / OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups.

R=Revised data. E=Estimated.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Table 1.4 World Oil Supply, 1985-Present (Thousand Barrels per Day)

	United States <u>1</u> /	Persian Gulf <u>2</u> /	OAPEC3/	OPEC <u>3</u> /	World
1985 Average	11,192	10,320	11,498	17,151	R59,262
L986 Average	10,905	12,441	13,653	19,310	R61,769
.987 Average	10,648	12,869	13,992	19,589	R62,427
.988 Average	10,473	14,310	15,662	21,465	R64,705
.989 Average	9,880	15,733	16,658	23,323	R65,892
.990 Average	9,677	16,249	17,232	24,536	R66,754
991 Average	9,883	15,704	16,747	24,625	R66,632
992 Average	9,768	17,010	17,871	25,818	R66,960
993 Average	9,602	17,792	18,505	26,610	R67,361
994 Average	9,413	18,072	18,745	27,031	R68,250
995 Average	9,400	R18,351	R19,069	R27,566	R69,860
996 Average	9,445	R18,486	R19,259	R28,321	R71,764
997 January	9,249	19,162	R19,898	R29,256	R73,305
February	9,519	19,377	R20,123	R29,531	R73,807
March	9,482	19,602	R20,373	R29,726	R73,836
April	9,385	19,762	R20,534	R29,946	R74,233
May	9,321	19,532	R20,344	R29,716	R73,432
June	9,253	19,122	R19,799	R29,326	R72,586
July	9,407	19,107	R19,859	R29,331	R73,249
August	9,346	20,127	R20,869	R30,491	R74,175
September	9,503	20,157	R21,089	R30,471	R74,629
October	9,531	20,197	R20,979	R30,611	R75,233
November	9,458	19,957	R20,689	R30,411	R75,079
December	R9,540	19,573	R20,315	R30,027	R74,806
997 Average	R9,416	19,641	R20,407	R29,905	R74,03
998 January	9,420	20,218	21,010	30,490	75,253

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Beginning in 1993, includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

<sup>2/</sup> See Appendix A for countries in this group.
3/ OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups.

R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B. •Monthly data are often preliminary and also may not average to the annual total due to rounding. See Section 4 for historical series.

Table 1.5 Oil Stocks in OECD Countries, End of Period (Million Barrels)

		France	Italy	Germany <u>1</u> /	United Kingdom	OECD Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /	Tota OEC
1985	December	139	157	233	123	1,092	1,519	113	494	66	3,284
1986	December	127	155	252	124	1,133	1,593	111	509	72	3,418
1987	December	127	169	259	121	1,130	1,607	126	540	71	3,474
1988	December	140	155	266	112	1,118	1,597	116	538	71	3,440
1989	December	138	164	271	118	1,133	1,581	114	577	71	3,476
1990	December	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December	158	164	312	115	1,240	1,653	119	645	69	3,726
1995 1996	December	159	162	301	107	1,228	1,563	109	630	71	3,601
	January	154	157	301	107	1,236	1,544	104	638	73	3,596
	February	156	156	298	103	1,224	1,500	102	615	69	3,511
	March		153	296	106	1,212	1,482	109	627	70	3,500
	April		150	298	109	1,236	1,502	109	622	72	3,540
	May		157	295	105	1,233	1,520	107	641	75	3,575
	June		158	296	104	1,229	1,546	107	640	73	3,597
	July	162	155	297	105	1,242	1,550	110	637	83	3,621
	August		159	295	101	1,237	1,545	110	658	79	3,629
	September		162	295	105	1,229	1,551	113	664	83	3,641
	October		155	296	104	1,237	1,538	111	673	82	3,640
	November	160	152	297	106	1,243	1,522	105	665	81	3,616
	December		152	300	108	1,256	1,507	103	651	74	3,591
1997			-			•	•				
	January	156	158	304	107	1,279	1,503	104	650	80	3,616
	February		156	307	105	1,269	1,482	101	642	75	3,570
	March		160	311	109	1,272	1,512	105	650	76	3,616
	April	159	151	300	108	1,247	1,519	108	665	80	3,619
	May		150	309	108	1,246	1,562	104	664	81	3,657
	June		151	298	111	1,231	1,577	103	662	83	3,656
	July	153	150	304	106	R1,225	1,559	105	670	81	R3,640
	August	158	151	303	108	R1,252	1,570	113	669	80	R3,683
	September		144	291	106	1,230	1,594	109	680	77	3,689
	October		144	290	106	R1,228	1,598	R109	R693	82	R3,709
	November	163	150	291	106	1,248	1,599	110	699	79	3,735

<sup>1/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

R=Revised data.

Notes: •Oil Stocks - See Explanatory Note 2 in Appendix B. •See Section 4 for historical series. Sources: See end of Section 1.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

 $<sup>\</sup>overline{4}$ / "Other" consists of Australia, New Zealand, and the U.S. Territories.

Table 1.6 Commercial and Government-Owned Oil Stocks in OECD Countries (End of September 1997) (Million Barrels)

		Government		
Country	Commercial	Owned	Total	
anada	109	0	109	
nited States1/	1,031	563	1,594	
ited States Territories	27	0	27	
pan	368	312	680	
stralia/New Zealand	50	NA	50	
stria	22	0	22	
lgium/Luxembourg	31	0	31	
mark	24	0	24	
land	25	0	25	
nce	157	0	157	
many2/	236	55	291	
ece	27	NA	27	
land	7	2	9	
ly	138	6	144	
herlands	99	0	99	
way	49	0	49	
rtugal	20	0	20	
ain	100	0	100	
eden	30	0	30	
tzerland	46	0	46	
key	51	0	51	
ted Kingdom	106	0	106	
D Europe	1,167	63	1,230	
al OECD	2,751	938	3,689	

<sup>1/2</sup> U.S. geographic coverage is the 50 States and the District of Columbia. 2/2 Data are for the unified Germany, i.e., the former East Germany and West Germany.

NA=Not Available.

Notes: •Sum of components may not equal total due to rounding. •Oil Stocks - See Explanatory Note 2 in Appendix B.

<sup>•</sup>OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group.

Sources: See end of Section 1.

Table 1.7. OECD Oil Demand, 1985-Present (Thousand Barrels per Day)

		France	Italy	Germany <u>1</u> /	United Kingdom	OECD Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /	Total OECD
1985	Average	1,775	1,717	2,338	1,634	11,681	15,726	1,504	4,384	976	34,271
1986 1987	Average	1,772	1,738	2,498	1,649	12,102	16,281	1,506	4,439	951 959	35,279
1987	Average	1,789 1,797	1,855 1,836	2,424 2,422	1,603 1,697	12,255 12,427	16,665 17,283	1,548 1,693	4,484 4,752	939 939	35,911 37,093
1989	Average	1,797	1,930	2,422	1,738	12,427	17,263	1,733	4,752	998	37,093 37,570
1990	Average	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475
1991	Average	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	38,067
1992	Average	1,935	1,937	2,843	1,801	13,605	17,033	1,643	5,446	1,041	38,768
1993	Average	1,875	1,852	2,900	1,815	13,523	17,033	1,688	5,401	1,118	38,967
1994	Average	1,833	1,841	2,879	1,837	13,523	17,718	1,727	5,674	1,174	39,890
1995	Average	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,227	40,537
1996	_		-	•	•	•	•	-		-	-
	January	1,879	2,113	2,901	1,762	14,036	18,261	1,805	6,328	1,165	41,595
	February	2,183	2,259	3,030	1,919	15,138	18,620	1,874	6,886	1,172	43,690
	March	1,979	2,189	2,860	1,859	14,275	18,301	1,744	6,437	1,151	41,907
	April	1,919	1,961	2,743	1,853	13,676	17,885	1,667	5,748	1,154	40,130
	May	1,810	1,880	2,864	1,846	13,778	17,957	1,715	5,147	1,113	39,709
	June	1,819	1,908	2,830	1,738	13,597	18,107	1,796	5,114	1,128	39,742
	July	1,977	2,158	2,957	1,790	14,245	18,211	1,802	5,502	1,084	40,843
	August	1,841	1,786	3,035	1,795	13,873	18,658	1,880	5,567	1,113	41,091
	September	1,929	2,074	3,095	1,877	14,775	17,655	1,763	5,361	1,024	40,578
	October	1,989	2,201	2,860	1,910	14,722	19,171	1,809	5,580	1,133	42,414
	November	1,880	2,083	2,975	1,966	14,700	18,535	1,941	6,114	1,064	42,354
	December	2,021	2,088	2,796	1,836	14,458	18,334	1,771	6,648	1,192	42,402
1007	Average	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,124	41,366
1997	Tam	2 165	2 027	2 001	1 020	14 622	10 E60	1 060	6 201	1 120	42 402
	January	2,165	2,037	2,901	1,828	14,633	18,560	1,862	6,291	1,138	42,483
	February	2,137 1,796	2,126 1,928	2,673 2,685	1,907 1,776	14,580 13,579	18,308 17,869	1,862 1,780	6,751 6,146	1,140 1,141	42,641 40,515
	April	1,790	1,928	3,225	1,776	R14,656	18,572	1,745	5,303	1,174	R41,449
		1,707	1,898	2,787	1,711	R13,494	18,244	1,823	5,076	1,065	R39,703
	May	1,882				R13,494 R14,340	18,563			1,000	R41,037
	June July	2,068	1,948 2,029	3,136 3,098	1,791 1,766	R14,340 R14,732	19,065	1,913 1,949	5,131 5,440	1,142	R41,037 R42,328
	August	1,787	1,808	2,740	1,724	R13,501	18,506	1,912	5,391	1,142	R42,328 R40,417
	September	1,787	2,181	3,161	1,833	R14,958	18,480	R1,856	5,411	1,158	R40,417
	October	2,148	2,161	2,877	R1,849	R15,125	19,121	R1,836 R1,934	R5,411	R1,158	R41,004 R42,749
	November	1,732	2,185	2,878	1,803	14,320	18,491	1,866	5,734	1,126	41,537
	1.0 v Chibot	1,,52	2,103	2,0,0	1,003	11,520	20,151	1,000	3,,31	1,120	

<sup>1/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

R=Revised data.

Notes: •The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition. •See Section 4 for historical series.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and the U.S. Territories.

## **Sources for Section 1 (Annual and Monthly Oil Data)**

Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1996 and Petroleum Supply Monthly, February 1998.

Other Countries: Annual data -- EIA, <u>International Energy Annual</u>, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, Oilweek, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., <u>Petroleum Intelligence Weekly</u>, various issues. All Other Countries -- PennWell Publishing Company, <u>Oil and</u> Gas Journal, various issues. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, October 1986.

## Oil Stocks

United States: EIA, Petroleum Supply Annual 1996 and Petroleum Supply Monthly, February 1998.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1997.

## Oil Demand

United States: EIA, Petroleum Supply Annual 1996 and Petroleum Supply Monthly, February 1998.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1997.

	2. lı	nternational Oil B	alance Data

Table 2.1 World Oil Balance, 1993-1997 (Million Barrels Per Day)

:	1993	1994	1995		199	6				:	1997		
_	<del></del>	Annual	<del></del>		Qua	rter		Annual			Quarter		Annual
		Average		First	Second	Third	Fourth	Average	First	Seco	nd Third	Fourt	th Average
OECD													
United States2/	9.60	9.41	9.40	9.40	9.39	9.40	9.59	9.44	9.41	9.32	9.42	9.51	9.42
Other OECD	8.40	9.25	9.80	10.19	10.15	10.20	10.63	10.29	10.67	10.15	10.22	10.78	10.46
Total OECD	18.00	18.66	19.20	19.59	19.53	19.61	20.22	19.74	20.08	19.47	19.63	20.29	19.87
Non-OECD													
OPEC	26.61	27.03	27.57	28.14	28.10	28.34	28.70	28.32	29.50	29.66	30.09	30.35	29.91
Former USSR	7.96	7.27	7.14	7.07	7.05	7.03	7.05	7.05	6.99	7.15	7.20	7.18	7.13
Other Non-OECD	14.80	15.29	15.95	16.47	16.69	16.61	16.84	16.65	17.07	17.14	17.09	17.21	17.13
Total Non-OECD	49.36	49.59	50.66	51.69	51.83	51.98		52.02	53.56	53.95	54.38	54.74	54.16
Total World Supply	67.36	68.25	69.86	71.29	71.37	71.59		71.76	73.64	73.42	74.01	75.04	74.03
Demand3/													
OECD													
United States2/	17.24	17.72	17.72	18.39	17.98	18.18	18.68	18.31	18.24	18.46	18.69	NA	NA
Other OECD			22.81	23.98	21.88	22.66		23.06	23.61	22.26	22.85	NA	NA
Total OECD		39.89	40.54	42.37	39.86	40.84		41.37	41.85	40.72	41.53	NA.	NA.
Non-OECD		02.002											
China	2.96	3.14	3.31	3.51	3.56	3,60	3.65	3.58	3.76	3.81	3.83	NA	NA
Former USSR	5.64	4.85	4.72	4.75	4.27	4.27	4.65	4.49	4.77	4.31	4.32	NA	NA
Other Non-OECD		20.43	21.62	22.49	22.41	21.73	23.21	22.46	23.55	23.47	22.75	NA	NA
Total Non-OECD		28.42	29.66	30.75	30.25	29.60	31.51	30.53	32.08	31.59	30.89	NA	NA NA
Total World Demand			70.19	73.12	70.11	70.44		71.89	73.94	72.31	72.43	NA NA	NA NA
Stock Draws / Discrepancy													
Net Reported Stock Draws4/													
U. S. Commercial	12	.00	.25	.86	77	16	.39	.08	09	71	18	NA	NA
U. S. Strategic		01	.00	.03	.05	.11	.09	.08	.03	.00	.00	NA NA	NA NA
											18	NA NA	NA NA
Other OECD		16	.09	.22	35	43	.06	12	22	.27			
For Export & Afloat	04	.03	12	.33	05	05	27	01	28	.27	49	NA	NA
Commr. Floating Storage		00	00	00	00	00	00	00	00	00	00	NA	NA
Total Reported Draws	24	15	.22	1.44	-1.12	54	.27	.01	55	17	85	NA	NA
Other Stock Draws and													
Statistical Discrepancy <u>5</u> /	08	.21	.12	.39	14	61	.82	.12	.84	94	73	NA	NA

<sup>1/</sup> Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

Note: Sum of components may not equal total due to rounding.

<sup>2/</sup> U.S. geographical coverage is the 50 States and the District of Columbia. See Explanatory Note 1 in Appendix B.

<sup>3/</sup> The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition.

<sup>4/</sup> Stock draws are positive numbers, stock additions are negative numbers.

<sup>5/</sup> This is computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw.

NA = Not Available.

Table 2.2 World Oil Supply, 1993-1997 (Million Barrels Per Day)

	1993	1994	1995		19	96				19	97		
		Annual			Qua	rter		Annual		Qua	rter		Annual
		Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average
OECD													
United States1/	9.60	9.41	9.40	9.40	9.39	9.40	9.59	9.44	9.41	9.32	9.42	9.51	9.42
Canada	2.24	2.33	2.45	2.42	2.45	2.51	2.59	2.49	2.61	2.46	2.58	2.69	2.58
North Sea2/	4.67	5.38	5.80	6.23	6.09	6.10	6.45	6.22	6.45	6.06	5.99	6.46	6.24
Other OECD	1.48	1.54	1.55	1.55	1.60	1.59	1.59	1.58	1.61	1.63	1.65	1.64	1.63
Total OECD	18.00	18.66	19.20	19.59	19.53	19.61	20.22	19.74	20.08	19.47	19.63	20.29	19.87
Non-OECD													
OPEC													
Crude													
Algeria	1.16	1.18	1.20	1.22	1.24	1.25	1.26	1.24	1.27	1.27	1.28	1.28	1.28
Indonesia	1.51	1.51	1.50	1.54	1.54	1.54	1.57	1.55	1.59	1.56	1.52	1.52	1.55
Iran	3.54	3.62	3.64	3.71	3.67	3.71	3.65	3.69	3.68	3.68	3.62	3.67	3.66
Iraq	.51	.55	.56	•55	•55	•55	.66	.58	1.13	1.07	1.28	1.26	1.19
Kuwait	1.85	2.02	2.06	2.05	2.06	2.06	2.08	2.06	2.09	2.06	2.07	2.11	2.08
Libya	1.36	1.38	1.39	1.40	1.40	1.40	1.40	1.40	1.43	1.45	1.45	1.45	1.45
Nigeria	1.96	1.93	1.99	2.18	2.19	2.17	2.22	2.19	2.28	2.31	2.33	2.36	2.32
Qatar	.41	.41	.44	.50	.50	.51	.53	.51	.58	.63	.68	.70	.65
Saudi Arabia	8.20	8.12	8.23	8.20	8.14	8.24	8.29	8.22	8.40	8.55	8.63	8.67	8.56
United Arab	0.20	0.12	0.23	0.20	0.11	0.21	0.23	0.22	0.10	0.55	0.05	0.07	0.30
Emirates	2.16	2.19	2.23	2.28	2.27	2.28	2.29	2.28	2.33	2.30	2.32	2.31	2.32
Venezuela	2.45	2.59	2.75	2.96	2.99	3.07	3.19	3.05	3.19	3.24	3.36	3.46	3.31
Natural Gas	2.45	2.55	2.75	2.50	2.55	3.07	3.13	3.03	3.13	3.21	3.30	3.40	3.31
Plant Liquids	1.44	1.46	1.51	1.50	1.50	1.50	1.50	1.50	1.47	1.49	1.49	1.50	1.49
Processing Gain.	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06
Total OPEC	26.61	27.03	27.57	28.14	28.10	28.34	28.70	28.32	29.50	29.66	30.09	30.35	29.91
Former USSR	7.96	7.27	7.14	7.07	7.05	7.03	7.05	7.05	6.99	7.15	7.20	7.18	7.13
China	2.89	2.94	2.99	3.09	3.14	3.14	3.16	3.13	3.22	3.24	3.19	3.15	3.20
Mexico	3.16	3.17	3.09	3.32	3.38	3.25	3.27	3.31	3.36	3.38	3.49	3.51	3.44
Other Non-OECD	8.75	9.17	9.86	10.06	10.17	10.21	10.41	10.21	10.48	10.52	10.41	10.55	10.49
Total Non-OECD	49.36	49.59	50.66	51.69	51.83	51.98	52.59	52.02	53.56	53.95	54.38	54.74	54.16
Total Supply	67.36	68.25	69.86	71.29	71.37	71.59	72.81	71.76	73.64	73.42	74.01	75.04	74.03
TOTAL SUPPLY	0/.30	00.45	09.00	/1.29	/1.3/	/1.59	/2.01	/1./0	/3.04	13.42	/4.UI	/3.04	74.03

 $<sup>\</sup>frac{1}{2}$ / U.S. geographic coverage is the 50 States and the District of Columbia.  $\frac{2}{2}$ / North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore. Notes: •Supply includes crude oil (including lease condensate), natural gas plant liquids, (except for individual OPEC countries), other hydrogen and hydrocarbons for refinery feedstocks, alcohol, liquids produced from coal and other sources, and processing gain (except for individual OPEC countries). For OPEC, natural gas plant liquids production and processing gain are shown as separate lines. •Sum of components may not equal total due to rounding.

NA = Not Available.

Table 2.3 Oil Stocks, End of Period (Million Barrels)

	1993	1994	1995		19	96			19	97	
		Year End		_	Qua	rter			Qua	rter	
				First	Second	Third	Fourth	First	Second	Third	Fourth
OECD											
United States1/											
Commercial	1,060	1,061	971	893	962	977	941	949	1,014	1,031	NA
Strategic	587	592	592	589	584	574	566	563	563	563	NA
U. S. Territories	25	26	24	22	23	29	25	23	27	27	NA
Canada	105	119	109	109	107	113	103	105	103	109	NA
Japan	618	645	630	627	640	664	651	650	662	680	NA
OECD Europe											
France	158	158	159	156	160	152	158	160	153	157	NA
Germany	309	312	301	296	296	295	300	311	298	291	NA
Italy	163	164	162	153	158	162	152	160	151	144	NA
United Kingdom	118	115	107	106	104	105	108	109	111	106	NA
Other OECD Europe	475	490	499	501	511	515	537	532	518	531	NA
Total	1,221	1,240	1,228	1,212	1,229	1,229	1,256	1,272	1,231	1,230	NA
Australia & New Zealand	44	43	47	48	50	54	49	53	56	50	NA
Total OECD	3,661	3,726	3,601	3,500	3,597	3,641	3,591	3,616	3,656	3,689	NA
Stocks for Export											
and Afloat2/	945	935	980	950	955	960	985	1,010	985	1,030	NA
Commercial Floating3/	70	70	70	70	70	70	70	70	70	70	NA

<sup>1/</sup> U.S. stock data include Alaskan crude oil in transit by water. These data were previously reported in stocks for export and afloat. U.S. geographic coverage is the 50 States and the District of Columbia.

Notes: •Oil Stocks - See Note 2 in Appendix B. •Sum of components may not equal total due to rounding.

<sup>2/</sup> Stocks held at export terminals of major crude oil producing countries and commercial oil afloat based on quarterly analysis of world seaborne movements.

<sup>3/</sup> Stocks stored by industry in tankers moored offshore. Excludes strategic storage.

 $<sup>\</sup>overline{NA}$  = Not Available.

Table 2.4 World Oil Demand, 1993-1997 (Million Barrels Per Day)

	1993	1994	1995			1996					1997		
		Annual			Qua	rter		Annual		Qua	rter		Annual
		Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average
OECD													
United States1/	17.24	17.72	17.72	18.39	17.98	18.18	18.68	18.31	18.24	18.46	18.69	NA	NA
U. S. Territories	.24	.26	.24	.21	.19	.17	.19	.19	.20	.17	.19	NA	NA
Canada	1.69	1.73	1.76	1.81	1.73	1.82	1.84	1.80	1.83	1.83	1.91	NA	NA
Japan	5.40	5.67	5.71	6.54	5.33	5.48	6.11	5.87	6.38	5.17	5.41	NA	NA
OECD Europe2/													
France	1.88	1.83	1.90	2.01	1.85	1.92	1.96	1.93	2.03	1.83	1.95	NA	NA
Italy	1.85	1.84	2.05	2.19	1.92	2.01	2.12	2.06	2.03	1.95	2.00	NA	NA
United Kingdom	1.81	1.84	1.84	1.84	1.81	1.82	1.90	1.85	1.83	1.77	1.77	NA	NA
Germany <u>3</u> /	2.90	2.88	2.88	2.93	2.81	3.03	2.88	2.91	2.76	3.05	3.00	NA	NA
Other OECD Europe	5.08	5.21	5.45	5.50	5.29	5.52	5.76	5.52	5.61	5.56	5.67	NA	NA
Total OECD Europe	13.52	13.60	14.12	14.47	13.68	14.29	14.63	14.27	14.25	14.15	14.39	NA	NA
Australia & New Zealand	.88	.92	.99	.96	.94	.90	.94	.93	.94	.94	.95	NA	NA
Total OECD	38.97	39.89	40.54	42.37	39.86	40.84	42.39	41.37	41.85	40.72	41.53	NA	NA
Non-OECD													
China	2.96	3.14	3.31	3.51	3.56	3.60	3.65	3.58	3.76	3.81	3.83	NA	NA
Former USSR	5.64	4.85	4.72	4.75	4.27	4.27	4.65	4.49	4.77	4.31	4.32	NA	NA
Other Non-OECD	19.48	20.43	21.62	22.49	22.41	21.73	23.21	22.46	23.55	23.47	22.75	NA	NA
Total Non-OECD	28.08	28.42	29.66	30.75	30.25	29.60	31.51	30.53	32.08	31.59	30.89	NA	NA
Total World Demand	67.04	68.31	70.19	73.12	70.11	70.44	73.90	71.89	73.94	72.31	72.43	NA	NA

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

NA = Not Available.

 $<sup>\</sup>overline{2}$ / "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Oil demand includes bunkers and refinery fuel. The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition. •Sum of components may not equal total due to rounding.

## **Sources for Section 2 (International Oil Balance Data)**

Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), <u>Petroleum Supply Annual 1996</u> and <u>Petroleum Supply Monthly</u>, February 1998.

Other Countries: Annual data -- EIA, <u>International Energy Annual</u>, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, <u>Oilweek</u>, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., <u>Petroleum Intelligence Weekly</u>, various issues. Other Countries -- PennWell Publishing Company, <u>Oil and Gas Journal</u>, various issues. Refinery Gains: National Petroleum Council, <u>U.S. Petroleum Refinery Study</u>, October 1986.

## Oil Stocks

United States: EIA, Petroleum Supply Annual 1996 and Petroleum Supply Monthly, February 1998.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), <u>Quarterly Oil Statistics and Energy</u>

<u>Balances</u>, various issues. • OECD, Monthly Oil Statistics data base, 1990-1997. Stocks for Export and Afloat and Commercial Floating Stocks -- Petroleum Economics Limited, Oil Industry Developments, various issues.

## Oil Demand

United States: EIA, Petroleum Supply Annual 1996 and Petroleum Supply Monthly, February 1998.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1990-1997.

OPEC Countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.

Other countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.

3. International Oil Imports

Table 3.1 Average Net Oil Imports into OECD Countries, (1996 Average)
(Million Barrels per Day)

				OEC	D Europe				OECD Out	side Euro	pe
	Total	Total	United Kingdom	France	Germany <u>1</u> /	Italy	Other Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /
Total Net Imports	21.455	7.339	-0.839	1.738	2.793	1.791	1.857	8.498	-0.803	5.790	0.632
Imports from OPEC5/	15.630	6.053	.234	.897	.660	1.244	3.018	4.194	.261	4.470	.653
Imports from Persian Gulf6/											
Total	9.215	3.171	.102	.573	.145	.502	1.849	1.594	.111	4.025	.313
Bahrain	.035	.001	.000	.001	.000	.001	.000	002	-	.033	.003
Iran	1.549	1.059	.017	.172	.018	.263	.588	.000	.039	.451	.000
Iraq	.007	.006	.000	.000	.000	.000	.006	.001	.000	.000	.000
Kuwait	1.034	.288	.032	.017	.016	.000	.223	.236	.000	.500	.010
U.A.E	1.474	.004	.000	.001	.000	.000	.003	003	.000	1.396	.077
Qatar	.352	.002	.000	.000	.000	.002	.000	.000	-	.335	.016
Saudi Arabia	4.763	1.811	.054	.381	.111	.236	1.029	1.363	.072	1.310	.207
Imports from OPEC-Africa											
Total	3.834	2.644	.090	.323	.462	.714	1.054	.872	.094	.032	.192
Algeria	1.089	.746	.023	.105	.125	.110	.383	.256	.063	.012	.012
Libya	1.204	1.204	.035	.051	.258	.580	.281	.000	.000	-	.000
Nigeria	1.541	.694	.032	.168	.079	.025	.389	.616	.031	.020	.180
Imports from OPEC-South America	ı										
Total	1.987	.206	.042	.001	.053	.008	.103	1.667	.056	.003	.054
Venezuela	1.987	.206	.042	.001	.053	.008	.103	1.667	.056	.003	.054
Imports from OPEC-Far East											
Total	.630	.033	.000	.000	.000	.021	.012	.058	.000	.442	.097
Indonesia	.630	.033	.000	.000	.000	.021	.012	.058	.000	.442	.097

<sup>1/</sup> The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

<sup>2/ &</sup>quot;Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

<sup>3/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and U. S. Territories.

<sup>5/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>6/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.2 Net Oil Imports into OECD Countries, (3rd Quarter 1997)
(Million Barrels per Day)

				OEC	D Europe				OECD Out	side Euro	pe
	Total	Total	United Kingdom	France	Germany <u>1</u> /	Italy	Other Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /
Total Net Imports	21.992	7.638	-0.821	1.715	2.857	1.708	2.179	8.990	-0.783	5.646	0.501
Imports from OPEC5/	16.225	6.233	.233	.965	.658	1.344	3.032	4.563	.343	4.433	.652
Imports from Persian Gulf6/											
Total	9.733	3.517	.110	.712	.176	.606	1.914	1.804	.112	3.979	.320
Bahrain	.019	.000	.000	.000	.000	.000	.000	003	-	.016	.006
Iran	1.462	1.022	.000	.166	.025	.254	.576	.000	.021	.419	.000
Iraq	.215	.159	.000	.065	.000	.027	.066	.030	.023	.000	.003
Kuwait	1.119	.304	.028	.045	.013	.000	.218	.294	.000	.520	.002
U.A.E	1.493	.013	.000	.000	.002	.000	.012	.000	.000	1.407	.073
Qatar	.361	.000	.000	.000	.000	.000	.000	.000	-	.352	.009
Saudi Arabia	5.064	2.019	.082	.436	.135	.324	1.041	1.484	.068	1.266	.227
Imports from OPEC-Africa											
Total	3.771	2.464	.090	.253	.423	.697	1.001	1.012	.100	.066	.129
Algeria	1.023	.658	.018	.118	.081	.078	.364	.270	.067	.027	.000
Libya	1.257	1.257	.062	.068	.264	.599	.264	.000	.000	-	.000
Nigeria	1.490	.549	.010	.068	.078	.020	.373	.741	.032	.039	.129
Imports from OPEC-South America	L										
Total	2.156	.231	.034	.000	.059	.027	.110	1.688	.131	.000	.106
Venezuela	2.156	.231	.034	.000	.059	.027	.110	1.688	.131	.000	.106
Imports from OPEC-Far East											
Total	.584	.021	.000	.000	.000	.013	.008	.056	.000	.404	.103
Indonesia	.584	.021	.000	.000	.000	.013	.008	.056	.000	.404	.103

<sup>1/</sup> The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

 $<sup>\</sup>overline{2}$ / "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

<sup>3/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and U. S. Territories.

<sup>5/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>6/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.3 Net Oil Imports into OECD Countries, (2nd Quarter 1997)
(Million Barrels per Day)

				OEC	D Europe				OECD Out	side Euro	pe
	Total	Total	United Kingdom	France	Germany <u>1</u> /	Italy	Other Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /
Total Net Imports	21.573	7.001	-0.614	1.626	2.800	1.599	1.590	9.324	-0.761	5.374	0.635
Imports from OPEC5/	15.942	5.810	.198	.792	.644	1.278	2.897	4.734	.233	4.329	.836
Imports from Persian Gulf6/											
Total	9.501	3.328	.103	.572	.178	.545	1.931	1.773	.135	3.939	.325
Bahrain	.028	.000	.000	.000	.000	.000	.000	.000	-	.028	.000
Iran	1.392	1.001	.000	.129	.027	.257	.587	.000	.065	.327	.000
Iraq	.445	.305	.000	.080	.000	.017	.209	.095	.000	.040	.003
Kuwait	1.014	.235	.028	.001	.014	.000	.192	.230	.000	.542	.007
U.A.E	1.425	.003	.000	.000	.002	.000	.000	007	.000	1.322	.107
Qatar	.347	.000	.000	.000	.000	.000	.000	.005	-	.330	.012
Saudi Arabia	4.850	1.784	.075	.362	.134	.271	.942	1.450	.070	1.350	.195
Imports from OPEC-Africa											
Total	3.665	2.218	.062	.220	.413	.718	.805	1.132	.023	.054	.239
Algeria	.978	.595	.022	.125	.077	.100	.270	.319	.023	.034	.006
Libya	1.246	1.246	.040	.077	.254	.596	.279	.000	.000	-	.000
Nigeria	1.441	.376	.000	.018	.082	.022	.255	.812	.000	.019	.233
Imports from OPEC-South America	L										
Total	2.241	.253	.033	.000	.053	.005	.162	1.769	.074	.000	.145
Venezuela	2.241	.253	.033	.000	.053	.005	.162	1.769	.074	.000	.145
Imports from OPEC-Far East											
Total	.563	.011	.000	.000	.000	.010	.000	.060	.000	.364	.127
Indonesia	.563	.011	.000	.000	.000	.010	.000	.060	.000	.364	.127

<sup>1/</sup> The data for Germany are for unified Germany, i.e., the former East Germany and West Germany.

 $<sup>\</sup>overline{2}$ / "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

<sup>3/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and U. S. Territories.

<sup>5/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>6/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.4 OECD Total Net Imports (Most Recent 12 Months)
(Million Barrels per Day)

	1996						1997					
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total	21.757	23.010	21.897	21.350	21.383	21.866	21.461	21.870	21.910	22.202	22.725	22.438
United States1/	8.404	8.595	8.460	8.780	8.997	9.565	9.402	8.691	9.081	9.204	9.347	8.705
Canada	981	752	919	724	724	796	763	625	846	881	719	838
OECD Europe2/	7.710	8.183	7.219	6.460	6.478	7.245	7.273	7.748	7.542	7.623	7.893	8.132
Main European Import	ers											
France	1.804	1.919	1.892	1.586	1.633	1.766	1.475	1.785	1.695	1.663	1.977	1.865
Germany3/	2.805	2.939	2.665	2.626	2.729	2.963	2.703	3.129	2.674	2.766	2.711	2.822
Italy	1.911	2.036	1.853	1.690	1.359	1.794	1.638	1.666	1.662	1.800	1.882	2.047
Spain	1.252	1.239	1.284	1.124	1.253	1.216	1.132	1.443	1.225	1.334	1.331	1.335
Netherlands	.801	.765	.747	.633	.977	.609	.795	.751	.995	.752	.587	.754
European Net Exporte	rs											
Norway	-3.108	-3.157	-3.182	-3.331	-3.642	-3.301	-2.931	-3.353	-2.731	-3.228	-2.810	-3.149
United Kingdom	995	952	856	810	795	661	385	768	951	742	-1.027	875
Smaller European Imp	orters											
Austria	.215	.206	.220	.178	.217	.223	.199	.248	.159	.249	.226	.218
Belgium	.665	.727	.510	.661	.569	.556	.521	.523	.629	.547	.579	.530
Denmark	030	005	.062	034	062	.017	015	026	.014	.022	.016	.009
Ireland	.143	.140	.139	.093	.165	.104	.134	.129	.096	.162	.160	.123
Finland	.255	.243	.147	.109	.136	.187	.180	.217	.112	.210	.243	.157
Greece	.355	.411	.353	.335	.332	.316	.335	.368	.419	.321	.419	.438
Iceland	.008	.018	.010	.020	.007	.022	.012	.020	.020	.023	.023	.014
Luxembourg	.038	.039	.046	.043	.040	.038	.036	.039	.037	.037	.042	.039
Portugal	.222	.374	.217	.315	.291	.257	.285	.289	.217	.349	.304	.381
Sweden	.449	.363	.332	.440	.423	.344	.319	.328	.347	.394	.347	.536
Switzerland	.290	.236	.270	.259	.250	.269	.293	.301	.294	.287	.269	.244
Turkey	.630	.640	.509	.521	.596	.527	.545	.659	.630	.677	.613	.645
Japan	6.013	6.196	6.531	6.298	5.995	5.218	4.914	5.573	5.576	5.792	5.759	5.911
Other OECD	.610	.788	.605	.536	.637	.633	.635	.482	.556	.463	.445	.528

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.5 OECD Imports from OPEC (Most Recent 12 Months)
(Million Barrels per Day)

	1996						1997					
-	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total	15.893	16.623	16.233	15.848	16.289	16.023	15.511	15.691	16.334	16.663	17.060	16.596
United States1/	3.920	4.066	4.109	4.251	4.538	4.886	4.774	4.273	4.691	4.730	4.800	4.277
Canada	.323	.313	.364	.274	.201	.241	.255	.293	.457	.279	.409	.285
OECD Europe2/	6.213	6.398	5.994	5.446	5.811	6.004	5.608	6.146	6.134	6.425	6.461	6.472
Main European Importe				3111				***	*****	*****	*****	
France	.888	.820	1.095	.809	.802	.753	.824	1.020	.797	1.084	1.131	.846
Germany3/	.645	.605	.618	.660	.668	.683	.581	.656	.682	.636	.649	.647
Italy	1.372	1.429	1.281	1.270	1.142	1.484	1.202	1.379	1.276	1.379	1.353	1.491
Spain	.864	.960	.773	.630	.707	.703	.693	.764	.722	.864	.820	.794
Netherlands	.911	.744	.620	.598	.948	.787	.699	.760	.927	.744	.810	.823
European Net Exporte:		*,		,,,,						*,		
Norway	.000	.009	.007	.000	.000	.000	.000	.000	.000	.000	.007	.008
United Kingdom	.188	.179	.215	.176	.176	.199	.219	.271	.190	.239	.170	.219
Smaller European Impe				V=.V			V	V				
Austria	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Belgium	.238	.298	.223	.157	.290	.315	.309	.244	.326	.352	.351	.346
Denmark	.044	.025	.052	.000	.025	.049	.033	.006	.027	.067	.024	.049
Ireland	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Finland	.000	.000	.000	.000	.000	.010	.000	.000	.000	.008	.007	.007
Greece	.297	.362	.293	.275	.284	.286	.294	.300	.333	.299	.360	.302
Portugal	.145	.197	.168	.220	.142	.180	.179	.177	.156	.206	.135	.161
Sweden	.105	.145	.104	.150	.127	.093	.092	.067	.089	.025	.086	.170
Switzerland	.079	.103	.109	.097	.063	.087	.093	.094	.101	.107	.111	.098
Turkey	.436	.522	.435	.404	.436	.377	.390	.409	.508	.415	.447	.509
Japan	4.620	5.026	5.137	5.236	4.839	4.175	3.977	4.357	4.416	4.527	4.775	4.801
Other OECD	.817	.820	.629	.642	.900	.717	.896	.621	.636	.702	.615	.762
Ocher Orch	.017	.020	.029	.012	.900	• / ± /	.090	.021	.030	.702	.013	.702

1997

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development; OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade.

<sup>•</sup>Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data. Sources: See end of Section 3.

Table 3.6 OECD Imports from Persian Gulf (Most Recent 12 Months)
(Million Barrels per Day)

	1330						1337					
-	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total	9.622	9.986	9.914	9.569	10.003	9.565	8.931	9.330	9.871	10.006	10.683	10.028
United States1/	1.673	1.548	1.533	1.625	1.858	1.701	1.763	1.712	1.836	1.867	1.876	1.682
Canada	.128	.130	.144	.067	.133	.137	.136	.066	.198	.071	.168	.065
OECD Europe2/	3.133	3.322	3.159	2.857	3.223	3.584	3.169	3.277	3.599	3.681	3.889	3.512
Main European Importe		3.322	3.1233	2,007	3.223	3.301	3,103	3.277	3.333	3.002	3.003	3.311
France	.569	.535	.753	.404	.599	.555	.563	.640	.644	.857	.842	.525
Germany3/	.106	.088	.094	.131	.189	.153	.192	.176	.187	.164	.205	.155
Italy	.532	.550	.589	.507	.458	.646	.526	.618	.571	.629	.645	.603
Spain	.288	.340	.301	.355	.388	.413	.287	.318	.358	.425	.411	.336
Netherlands	.661	.568	.499	.456	.569	.642	.515	.539	.640	.467	.670	.588
European Net Exporter						**	75_5	,,,,		V = 0 .		
Norway	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom	.067	.066	.059	.084	.078	.107	.124	.123	.091	.115	.081	.129
Smaller European Impo							·					
Austria	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Belgium	.219	.250	.191	.119	.233	.285	.250	.228	.292	.331	.331	.331
Denmark	.000	.000	.000	.000	.000	.000	.000	.000	.000	.023	.000	.000
Finland	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Greece	.245	.317	.250	.232	.251	.254	.243	.266	.288	.262	.328	.270
Portugal	.100	.091	.057	.164	.052	.161	.138	.062	.087	.119	.051	.088
Sweden	.061	.132	.074	.132	.070	.064	.067	.067	.065	.000	.066	.136
Switzerland	.000	.000	.005	.005	.010	.014	.014	.009	.009	.005	.014	.005
Turkey	.286	.385	.287	.267	.327	.289	.249	.231	.365	.282	.244	.348
Japan	4.219	4.616	4.750	4.705	4.499	3.816	3.505	3.884	3.955	4.103	4.518	4.517
Other OECD	.469	.369	.328	.315	.291	.327	.357	.392	.282	.284	.233	.253

1997

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy,

Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. 3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4

<sup>•</sup>A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.7 United States--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

	1990						1997					
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports	8.404	8.595	8.460	8.780	8.997	9.565	9.402	8.691	9.081	9.204	9.347	8.705
Imports from $OPEC_{1}/$	3.920	4.066	4.109	4.251	4.538	4.886	4.774	4.273	4.691	4.730	4.800	4.277
Imports from												
Persian Gulf <u>2</u> /												
Total	1.673	1.548	1.533	1.625	1.858	1.701	1.763	1.712	1.836	1.867	1.876	1.682
Bahrain	.000	003	.000	003	.000	.000	.000	003	003	003	003	.000
Iran	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iraq	.014	.000	.000	.035	.069	.102	.115	.088	.000	.000	.177	.220
Kuwait	.262	.209	.172	.315	.204	.128	.361	.331	.229	.322	.349	.220
U.A.E	003	.000	.000	014	003	003	016	.011	009	003	002	003
Qatar	.000	.000	.000	.000	.015	.000	.000	.000	.000	.000	.016	.000
Saudi Arabia	1.400	1.342	1.361	1.292	1.573	1.474	1.303	1.285	1.619	1.551	1.339	1.245
Imports from												
OPEC-Africa												
Total	.534	.813	.943	.867	1.025	1.249	1.117	.871	1.143	1.022	.949	.891
Algeria	.214	.282	.319	.309	.320	.290	.349	.291	.261	.259	.272	.267
Libya	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria	.320	.531	.624	.558	.705	.959	.768	.580	.882	.763	.677	.624
Imports from												
OPEC-South America												
Total	1.635	1.629	1.584	1.738	1.615	1.850	1.840	1.614	1.695	1.756	1.930	1.628
Venezuela	1.635	1.629	1.584	1.738	1.615	1.850	1.840	1.614	1.695	1.756	1.930	1.628
Imports from												
OPEC-Far East												
Total	.078	.073	.049	.018	.040	.086	.054	.073	.014	.082	.042	.076
Indonesia	.078	.073	.049	.018	.040	.086	.054	.073	.014	.082	.042	.076

1997

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.8 Japan--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

-					· · · · · · · · · · · · · · · · · · ·							
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports	6.013	6.196	6.531	6.298	5.995	5.218	4.914	5.573	5.576	5.792	5.759	5.911
<pre>Imports from OPEC1/ Imports from    Persian Gulf2/</pre>	4.620	5.026	5.137	5.236	4.839	4.175	3.977	4.357	4.416	4.527	4.775	4.801
TotalBahrain	4.219 .053	4.616 .037	4.750 .009	4.705 .029	4.499 .045	3.816 .031	3.505 .008	3.884 .011	3.955 .008	4.103 .031	4.518 .014	4.517 .014
Iran	.456	.465	.742	.669	.316	.409	.253	.469	.322	.467	.401	.505
Iraq	.000	.000	.067	.000	.061	.059	.000	.000	.000	.000	.000	.000
Kuwait	.519	.642	.571	.548	.640	.464	.523	.471	.515	.575	.541	.539
U.A.E	1.419	1.706	1.449	1.488	1.570	1.220	1.180	1.368	1.422	1.430	1.390	1.585
Qatar	.276	.239	.402	.397	.349	.350	.291	.320	.417	.318	.426	.414
Saudi Arabia	1.496	1.527	1.510	1.574	1.516	1.284	1.251	1.245	1.271	1.282	1.745	1.459
Imports from OPEC-Africa												
Total	.000	.033	.000	.000	.016	.046	.100	.079	.038	.081	.000	.000
Algeria	.000	.000	.000	.000	.016	.046	.041	.019	.038	.024	.000	.000
Nigeria Imports from OPEC-South America	.000	.033	.000	.000	.000	.000	.059	.060	.000	.057	.000	.000
Total	.014	.019	.000	.011	.000	.000	.000	.000	.000	.000	.000	.000
Venezuela	.014	.019	.000	.011	.000	.000	.000	.000	.000	.000	.000	.000
Imports from OPEC-Far East												
Total	.439	.395	.397	.549	.369	.344	.380	.405	.432	.373	.272	.298
Indonesia	.439	.395	.397	.549	.369	.344	.380	.405	.432	.373	.272	.298

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<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis.

<sup>•</sup>Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.9 OECD Europe--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

_	·											
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports	7.710	8.183	7.219	6.460	6.478	7.245	7.273	7.748	7.542	7.623	7.893	8.132
Imports from OPEC $1/$	6.213	6.398	5.994	5.446	5.811	6.004	5.608	6.146	6.134	6.425	6.461	6.472
Imports from Persian Gulf <u>2</u> /												
Total	3.133	3.322	3.159	2.857	3.223	3.584	3.169	3.277	3.599	3.681	3.889	3.512
Bahrain	.000	.003	.002	.000	.000	.000	.000	.000	.001	.000	.000	.001
Iran	.957	.866	.754	.813	.875	1.157	.964	.899	1.153	1.013	1.057	.960
Iraq	.065	.308	.342	.344	.404	.471	.036	.000	.151	.330	.394	.094
Kuwait	.218	.309	.322	.222	.217	.248	.240	.286	.247	.382	.237	.301
U.A.E	.004	.001	.000	.002	.003	.002	.002	.036	.003	.001	.005	.000
Qatar	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia	1.889	1.835	1.738	1.475	1.723	1.705	1.927	2.057	2.043	1.954	2.195	2.156
Imports from OPEC-Africa												
Total	2.898	2.915	2.614	2.457	2.264	2.187	2.204	2.639	2.283	2.471	2.401	2.750
Algeria	.749	.807	.660	.641	.694	.551	.542	.696	.683	.594	.555	.754
Libya	1.243	1.303	1.179	1.271	1.109	1.295	1.333	1.289	1.246	1.235	1.206	1.238
Nigeria	.906	.806	.776	.545	.461	.341	.328	.654	.354	.642	.640	.757
Imports from												
OPEC-South America												
Total	.162	.147	.204	.132	.324	.208	.229	.220	.236	.236	.168	.178
Venezuela	.162	.147	.204	.132	.324	.208	.229	.220	.236	.236	.168	.178
Imports from	<b>-</b>	·	<b>-</b>	<b>-</b>								
OPEC-Far East												
Total	.021	.017	.019	.000	.000	.026	.006	.011	.017	.037	.003	.032
Indonesia	.021	.017	.019	.000	.000	.026	.006	.011	.017	.037	.003	.032

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<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

<sup>•</sup>A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

<sup>•</sup>See Section 4 for annual data.

Table 3.10 France--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

_												
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports Imports from OPEC1/ Imports from	1.804	1.919 .820	1.892 1.095	1.586 .809	1.633 .802	1.766 .753	1.475 .824	1.785 1.020	1.695 .797	1.663 1.084	1.977 1.131	1.865 .846
Persian Gulf2/												
Total	.569	.535	.753	.404	.599	.555	.563	.640	.644	.857	.842	.525
Bahrain	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000	.001
Iran	.123	.061	.122	.107	.153	.102	.131	.127	.206	.166	.172	.104
Iraq	.000	.065	.159	.102	.082	.154	.002	.000	.064	.133	.149	.033
Kuwait	.000	.002	.070	.002	.003	.000	.000	.063	.003	.069	.000	.000
U.A.E	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Qatar	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia	.444	.407	.401	.194	.361	.299	.429	.450	.370	.489	.521	.388
Imports from OPEC-Africa												
Total	.319	.285	.342	.405	.204	.196	.261	.379	.153	.227	.288	.321
Algeria	.068	.177	.216	.187	.124	.115	.138	.195	.091	.065	.060	.116
Libya	.068	.014	.044	.063	.080	.051	.102	.110	.027	.066	.058	.060
Nigeria Imports from	.183	.094	.083	.154	.000	.030	.022	.074	.035	.096	.170	.146
OPEC-South America												
Total	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Venezuela Imports from OPEC-Far East	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Total	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
Indonesia	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000

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 $<sup>\</sup>frac{1}{2}$  OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

 $<sup>\</sup>overline{2}$ / The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.11 Germany--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

-												
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports	2.805	2.939	2.665	2.626	2.729	2.963	2.703	3.129	2.674	2.766	2.711	2.822
Imports from OPEC1/	.645	.605	.618	.660	.668	.683	.581	.656	.682	.636	.649	.647
Imports from Persian Gulf <u>2</u> /												
Total	.106	.088	.094	.131	.189	.153	.192	.176	.187	.164	.205	.155
Bahrain	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iran	.000	.012	.011	.028	.029	.016	.037	.022	.037	.017	.041	.019
Iraq	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.009
Kuwait	.011	.009	.009	.010	.020	.009	.013	.014	.009	.016	.012	.014
U.A.E	.000	.000	.000	.000	.002	.002	.002	.005	.000	.000	.000	.000
Qatar	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia	.094	.068	.074	.094	.137	.125	.140	.135	.141	.130	.152	.113
Imports from OPEC-Africa												
Total	.511	.503	.505	.485	.416	.470	.352	.378	.459	.431	.401	.449
Algeria	.139	.108	.100	.108	.108	.054	.070	.061	.092	.091	.106	.087
Libya	.250	.276	.216	.256	.182	.318	.261	.252	.273	.267	.215	.261
Nigeria	.121	.118	.189	.121	.126	.097	.021	.066	.095	.073	.080	.102
Imports from OPEC-South America												
Total	.029	.014	.018	.043	.064	.059	.037	.101	.036	.041	.043	.043
Venezuela	.029	.014	.018	.043	.064	.059	.037	.101	.036	.041	.043	.043
Imports from OPEC-Far East												
Total	.000	.000	.000	.000	.000	.001	.000	.001	.000	.000	.000	.000
Indonesia	.000	.000	.000	.000	.000	.001	.000	.001	.000	.000	.000	.000

1997

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.12 Italy--Net Oil Imports (Most Recent 12 Months)
(Million Barrels per Day)

_												
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports	1.911	2.036	1.853	1.690	1.359	1.794	1.638	1.666	1.662	1.800	1.882	2.047
Imports from OPEC <u>1</u> / Imports from Persian Gulf <u>2</u> /	1.372	1.429	1.281	1.270	1.142	1.484	1.202	1.379	1.276	1.379	1.353	1.491
Total	.532	.550	.589	.507	.458	.646	.526	.618	.571	.629	.645	.603
Bahrain	.000	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iran	.238	.241	.249	.250	.147	.365	.256	.232	.259	.272	.261	.242
Iraq	.000	.048	.000	.032	.000	.049	.000	.000	.021	.062	.095	.022
Kuwait	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000
U.A.E	.000	.000	.000	.002	.000	.000	.000	.000	.000	.000	.000	.000
Qatar	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia	.294	.258	.338	.223	.311	.232	.270	.386	.291	.295	.288	.338
Imports from OPEC-Africa												
Total	.820	.848	.672	.756	.669	.814	.669	.699	.670	.723	.705	.850
Algeria	.122	.110	.084	.073	.141	.101	.059	.058	.073	.104	.056	.128
Libya	.637	.632	.524	.617	.492	.684	.610	.612	.597	.588	.600	.611
Nigeria Imports from OPEC-South America	.061	.105	.065	.066	.036	.029	.000	.030	.000	.031	.048	.111
Total	.000	.017	.004	.007	.016	.000	.000	.051	.018	.013	.000	.006
Venezuela Imports from OPEC-Far East	.000	.017	.004	.007	.016	.000	.000	.051	.018	.013	.000	.006
Total	.021	.017	.018	.000	.000	.024	.006	.010	.017	.013	.003	.032
Indonesia	.021	.017	.018	.000	.000	.024	.006	.010	.017	.013	.003	.032

1997

 $<sup>\</sup>frac{1}{2}$  OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.13 OECD Imports from Iraq (Most Recent 12 Months)

(Million Barrels per Day for Crude Oil, Natural Gas Liquids and Refined Products)

-												
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total	0.080	0.308	0.409	0.380	0.537	0.636	0.155	0.097	0.152	0.401	0.610	0.386
United States1/	.014	.000	.000	.035	.069	.102	.115	.088	.000	.000	.177	.220
Canada	.000	.000	.000	.000	.000	.000	.000	.000	.000	.071	.033	.065
OECD Europe2/	.065	.308	.342	.344	.404	.471	.036	.000	.151	.330	.394	.094
Main European Importe	ers											
France	.000	.065	.159	.102	.082	.154	.002	.000	.064	.133	.149	.033
Germany3/	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.009
Italy	.000	.048	.000	.032	.000	.049	.000	.000	.021	.062	.095	.022
Spain	.029	.094	.021	.097	.131	.066	.033	.000	.066	.135	.150	.030
Netherlands	.000	.006	.000	.000	.094	.031	.000	.000	.000	.000	.000	.000
European Net Exporte	rs											
United Kingdom	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Smaller European Impo	orters											
Austria	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Belgium	.000	.020	.029	.008	.014	.053	.000	.000	.000	.000	.000	.000
Denmark	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Greece	.000	.011	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Portugal	.000	.000	.000	.034	.000	.031	.000	.000	.000	.000	.000	.000
Sweden	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Switzerland	.000	.000	.000	.000	.010	.005	.000	.000	.000	.000	.000	.000
Turkey	.037	.064	.133	.071	.074	.081	.000	.000	.000	.000	.000	.000
Japan	.000	.000	.067	.000	.061	.059	.000	.000	.000	.000	.000	.000
Other OECD	.000	.000	.000	.001	.003	.004	.004	.009	.000	.000	.006	.007

Sources: See end of Section 3.

1996

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy,

Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

<sup>3/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Table 3.14 OECD Imports from Kuwait (Most Recent 12 Months)
(Million Barrels per Day)

	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total	1.009	1.170	1.075	1.096	1.064	0.853	1.131	1.090	0.993	1.281	1.130	1.063
United States <u>1</u> /	.262	.209	.172	.315	.204	.128	.361	.331	.229	.322	.349	.220
Canada	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OECD Europe2/	.218	.309	.322	.222	.217	.248	.240	.286	.247	.382	.237	.301
Main European Import	ers											
France	.000	.002	.070	.002	.003	.000	.000	.063	.003	.069	.000	.000
Germany3/	.011	.009	.009	.010	.020	.009	.013	.014	.009	.016	.012	.014
Italy	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000
Spain	.000	.000	.000	.003	.000	.000	.000	.000	.000	.000	.000	.000
Netherlands	.164	.255	.148	.158	.125	.205	.184	.149	.188	.238	.180	.222
European Net Exporte	rs											
Norway	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom	.028	.028	.059	.029	.029	.027	.028	.028	.027	.029	.029	.036
Smaller European Imp	orters											
Austria	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Belgium	.000	.000	.015	.008	.024	.007	.000	.000	.000	.000	.000	.014
Denmark	.000	.000	.000	.000	.000	.000	.000	.000	.000	.023	.000	.000
Greece	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Portugal	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Sweden	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Switzerland	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey	.015	.015	.020	.012	.016	.000	.016	.031	.020	.007	.016	.016
Japan	.519	.642	.571	.548	.640	.464	.523	.471	.515	.575	.541	.539
Other OECD	.011	.010	.011	.011	.002	.013	.006	.002	.002	.002	.003	.002

1997

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

<sup>3/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

# **Sources for Section 3 (International Oil Imports)**

### Oil Imports

United States: • Energy Information Administration (EIA), <u>Petroleum Supply Annual 1996</u> and <u>Petroleum Supply Monthly</u>, February 1998. Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), <u>Quarterly Oil Statistics and Energy Balances</u>, various issues. • OECD, Monthly Oil Statistics data base, 1991-1997.

Historical Oil Data Series
 1970-1997

Table 4.1a World Crude Oil Production (Including Lease Condensate), 1970-1997 (Thousand Barrels per Day)

	Algeria	Indo- nesia	Iran	Iraq	Kuwait1/	Libva	Nigeria	Qatar	Saudi Arabia1/	United Arab Emirates	Vene- zuela	Total OPEC
1970 Average	1,029	854	3,829	1,549	2,990	3,318	1,083	362	3 <b>,</b> 799	780	3,708	23,301
1971 Average	785	892	4,540	1,694	3,197	2,761	1,531	431	4,769	1,060	3,549	25,209
1972 Average	1,062	1,081	5,023	1,466	3,283	2,239	1,816	482	6,016	1,203	3,220	26,891
1973 Average	1,097	1,339	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	30,629
1974 Average	1,009	1,375	6,022	1,971	2,546	1,521	2,255	518	8,480	1,679	2,976	30,351
1975 Average		1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
1976 Average	1,075	1,504	5,883	2,415	2,145	1,933	2,067	497	8,577	1,936	2,294	30,327
1977 Average	1,152	1,686	5,663	2,348	1,969	2,063	2,085	445	9,245	1,999	2,238	30,893
1978 Average	1,231	1,635	5,242	2,563	2,131	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average	1,224	1,591	3,168	3,477	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average	1,106	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average	1,002	1,605	1,380	1,000	1,125	1,140	1,433	405	9,815	1,474	2,102	22,481
1982 Average	987	1,339	2,214	1,012	823	1,150	1,295	330	6,483	1,250	1,895	18,778
1983 Average	968	1,343	2,440	1,005	1,064	1,105	1,241	295	5,086	1,149	1,801	17,497
1984 Average	1,014	1,412	2,174	1,209	1,157	1,087	1,388	394	4,663	1,146	1,798	17,442
1985 Average	1,037	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,181
1986 Average		1,390	2,035	1,690	1,419	1,034	1,467	308	4,870	1,330	1,787	18,275
1987 Average		1,343	2,298	2,079	1,585	972	1,341	293	4,265	1,541	1,752	18,517
1988 Average		1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,324
1989 Average	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,071
1990 Average	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average	•	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average		1,503	3,643	560	2,057	1,390	1,993	R442	8,231	R2,233	2,750	R26,004
1996 Average		1,547	3,686	R579	2,062	1,401	2,188	510	8,218	2,278	3,053	R26,764
1997 Average P		1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,362
199/ Average P	1,411	1,540	3,004	1,10/	4,003	1,440	4,311	043	0,302	2,310	3,313	20,302

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1970 through 1989 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary. R=Revised data.

Notes: •OPEC=Organization of Petroleum Exporting Countries.

Table 4.1b World Crude Oil Production (Including Lease Condensate), 1970-1997 (Thousand Barrels per Day)

	Norway	United Kingdom	North Sea <u>1</u> /	Angola	Argen- tina	Austra- lia	Brazil	Canada	China	Colombia	Ecuado
1970 Average	0	2	0	112	393	178	167	1,263	600	219	4
1971 Average	6	2	6	93	423	309	174	1,348	780	214	4
1972 Average	33	2	35	140	433	327	167	1,532	900	196	78
1973 Average	32	2	36	162	420	369	169	1,798	1,090	184	209
1974 Average	35	2	38	169	414	388	176	1,551	1,315	168	17'
1975 Average	189	12	202	165	395	409	177	1,430	1,490	157	163
L976 Average	279	245	525	108	398	426	167	1,314	1,670	146	188
.977 Average	280	768	1,055	194	431	431	161	1,321	1,874	138	18
1978 Average	356	1,082	1,446	131	453	432	160	1,316	2,082	131	20
979 Average	403	1,568	1,976	147	473	441	166	1,500	2,122	124	21
.980 Average	528	1,622	2,151	150	491	380	182	1,435	2,114	126	20
981 Average	501	1,811	2,322	130	496	394	213	1,285	2,012	125	21
L982 Average	520	2,065	2,617	122	491	370	260	1,271	2,045	141	21
L983 Average	614	2,291	2,965	177	491	416	339	1,356	2,120	152	23
1984 Average	697	2,480	3,250	208	478	492	475	1,438	2,296	168	25
L985 Average	788	2,530	3,417	231	460	575	564	1,471	2,505	176	28
L986 Average	870	2,539	3,547	282	434	520	572	1,474	2,620	305	29
.987 Average	1,022	2,406	3,584	360	428	547	566	1,535	2,690	385	17
L988 Average	1,158	2,232	3,540	452	449	538	554	1,616	2,730	378	30
L989 Average	1,554	1,802	3,515	455	460	490	596	1,560	2,757	403	27
L990 Average	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	28
L991 Average	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	29
1992 Average	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	32
.993 Average	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	34
L994 Average	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	36
L995 Average	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	39
L996 Average	3,104	2,568	5,822	709	756	570	795	R1,837	3,131	623	R39
1997 Average P	3,153	2,517	5,843	720	835	588	827	1,893	3,200	662	38

 $<sup>\</sup>frac{1}{2}$ / North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore. P=Preliminary. R=Revised.

Table 4.1c World Crude Oil Production (Including Lease Condensate), 1970-1997 (Thousand Barrels per Day)

	Formt	Gabon	Tndia	Malaysia	Movido	Oman	Russia	Former U.S.S.R.	Syria	United States	Othor1	/ World
	Egypt	Gabon	Ilidia	mataysta	Mexico	Ollian	Russia	U.S.S.R.	Sylia	States	Other 1	/ World
1970 Average	326	109	144	18	487	332		6,985	80	9,637	1,529	45,886
1971 Average	293	115	143	69	486	294		7,475	100	9,463	1,518	48,518
1972 Average	231	125	156	93	505	282		7,890	124	9,441	1,592	51,138
1973 Average	165	150	147	91	465	293		8,324	105	9,208	1,667	55,679
1974 Average	150	202	156	81	571	290		8,912	124	8,774	1,711	55,716
1975 Average	235	223	165	98	705	343		9,523	170	8,375	1,636	52,828
1976 Average	330	223	175	165	831	366		10,060	175	8,132	1,620	57,34
1977 Average	415	222	199	184	981	341		10,603	188	8,245	1,655	59,70
1978 Average	485	209	226	217	1,209	315		11,105	170	8,707	1,706	60,15
1979 Average	525	203	245	283	1,461	295		11,384	166	8,552	1,821	62,67
1980 Average	595	175	182	283	1,936	282		11,706	164	8,597	1,842	59,60
1981 Average	598	151	325	264	2,313	319		11,850	166	8,572	1,859	56,07
1982 Average	670	156	390	306	2,748	324		11,912	160	8,649	1,892	53,48
1983 Average	727	157	480	365	2,689	375		11,972	167	8,688	1,946	53,25
1984 Average	822	157	519	440	2,780	414		11,861	170	8,879	2,015	54,48
1985 Average	887	172	620	440	2,745	498		11,585	178	8,971	2,124	53,98
1986 Average	813	166	630	504	2,435	560		11,895	194	8,680	2,166	56,22
1987 Average	896	155	609	497	2,548	582		12,050	230	8,349	2,120	56,66
1988 Average	848	159	635	540	2,512	617		12,053	265	8,140	2,235	58,73
1989 Average	865	208	700	585	2,520	641		11,715	340	7,613	2,249	59,86
1990 Average	873	270	660	619	2,553	685		10,975	388	7,355	2,253	60,56
1991 Average	874	294	615	646	2,680	700		9,992	492	7,417	2,274	60,20
1992 Average	881	298	561	653	2,669	740	7,632		481	7,171	R3,228	R60,21
1993 Average	890	313	534	640	2,673	776	6,730		554	6,847	R3,280	R60,23
1994 Average	896	329	590	645	2,685	810	6,135		560	6,662	R3,382	R60,99
1995 Average	920	R365	703	682	2,618	851	5,995		R575	6,560	R3,410	R62,33
1996 Average	922	368	651	695	2,855		R5,850		604	6,465	R3,509	R64,05
1997 Average P	874	368	675	746	3,023	887	5,884		561	6,411	3,698	66,26

<sup>1/</sup> Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

<sup>-- =</sup> Not applicable. P=Preliminary. R=Revised data.

Table 4.2 OPEC Crude Oil Production (Excluding Condensate), 1980-1997 (Thousand Barrels per Day)

Alge	eria	Indo- nesia	Iran	Iraq	Kuwait <u>1</u> /	Libya	Nigeria	Qatar	Saudi Arabia <u>l</u> /	United Arab Emirates	Vene- zuela	Total OPEC
1980 Average 1,	,006	1,497	1,662	2,514	1,656	1,787	2,045	472	9,900	1,704	2,147	26,390
1981 Average	802	1,513	1,380	1,000	1,125	1,140	1,423	405	9,815	1,469	2,083	22,155
1982 Average	712	1,247	2,214	1,012	823	1,150	1,285	330	6,483	1,215	1,878	18,349
1983 Average	648	1,245	2,440	1,005	1,064	1,105	1,231	295	5,086	1,109	1,768	16,996
1984 Average	694	1,279	2,174	1,209	1,157	1,087	1,368	394	4,663	1,091	1,689	16,805
1985 Average	702	1,181	2,250	1,433	1,023	1,059	1,475	301	3,388	1,133	1,558	15,503
1986 Average	600	1,257	2,035	1,690	1,419	1,034	1,447	308	4,870	1,270	1,645	17,575
1987 Average	648	1,189	2,298	2,079	1,585	972	1,291	293	4,265	1,441	1,587	17,648
1988 Average	640	1,177	2,240	2,685	1,492	1,175	1,400	346	5,086	1,465	1,715	19,421
1989 Average	690	1,231	2,810	2,897	1,783	1,150	1,666	380	5,064	1,783	1,747	21,201
1990 Average	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991 Average	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992 Average	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993 Average	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994 Average	750	1,334	3,600	548	2,034	1,378	1,887	409	8,147	2,183	2,542	24,812
1995 Average	767	1,343	3,608	550	2,057	1,390	1,876	449	8,231	2,197	2,710	25,179
1996 Average	812	1,367	3,651	579	2,062	1,401	2,051	475	8,218	2,198	3,013	25,826
1997 Average P.	847	1,366	3,629	1,182	2,083	1,446	2,217	614	8,562	2,236	3,275	27,457

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary.

Note: OPEC=Organization of Petroleum Exporting Countries. See Appendix A for Countries in this group.

Table 4.3 World Natural Gas Plant Liquids Production, 1970-1996 (Thousand Barrels per Day)

Alger	ia Ca	anada	Mexico	Saudi Arabia	Russia	Former USSR	United States <u>1</u> /	Persian Gulf <u>2</u> /	OAPEC3/	OPEC3/	World
970 Average	3	200	58	50		120	1,660	119	137	205	2,383
	4	234	59	50		135	1,693	138	147	243	2,508
972 Average	4	293	61	55		155	1,744	155	159	275	2,676
	9	314	75	90		170	1,738	191	196	324	2,785
974 Average 1	2	314	80	130		190	1,688	231	219	347	2,789
975 Average 2	0	309	80	140		205	1,633	246	252	372	2,790
976 Average 2	4	289	95	185		220	1,603	291	313	442	2,865
977 Average 1	9	290	105	215		235	1,618	335	366	482	2,982
978 Average 2	5	281	115	250		255	1,567	410	447	566	3,078
979 Average 3	0	331	150	303		270	1,584	458	535	637	3,285
980 Average 3	6	331	193	369		285	1,573	534	618	732	3,44
981 Average 4	9	330	241	433		300	1,609	599	691	825	3,62
982 Average 5	8	318	255	430		315	1,550	612	721	842	3,620
983 Average 5	6	309	265	330		330	1,559	552	655	780	3,63
984 Average 10	5	336	257	355		340	1,630	604	761	869	3,869
985 Average 12	0	337	271	375		350	1,609	645	808	892	3,93
986 Average 12	0	328	352	385		440	1,551	700	860	969	4,150
987 Average 14	0	367	338	418		430	1,595	721	900	1,006	4,279
988 Average 12	0	381	370	499		450	1,625	808	979	1,077	4,483
989 Average 13	0	410	384	503		425	1,546	851	1,041	1,188	4,50
990 Average 13	0	426	428	620		425	1,559	930	1,107	1,281	4,632
991 Average 14	0	431	457	680		420	1,659	931	1,113	1,299	4,82
992 Average 14	0	460	454	713	230		1,697	1,003	1,185	1,364	R4,97
993 Average 14	5	506	459	704	220		1,736	1,040	1,238	1,435	R5,18
994 Average 14	-	529	461	698	200		1,727	1,071	1,267	1,465	R5,29
995 Average 14		581	447	701	180		1,762	1,106	1,301	1,506	R5,48
996 Average R15	-	R596	423	697	R185		1,830	1,082	R1,295	R1,501	R5,58
997 Average P 14		631	386	723	200		1,842	1,108	1,310	1,488	5,59

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups.

P=Preliminary. R=Revised data.

Table 4.4 World Oil Supply, 1970-1997 (Thousand Barrels per Day)

	United	Persian			
	States <u>1</u> /	Gulf <u>2</u> /	OAPEC3/	OPEC <u>3</u> /	World
1970 Average	11,673	13,541	14,571	23,567	48,986
1971 Average	11,554	15,940	15,427	25,514	51,766
1972 Average	11,601	17,734	16,451	27,228	54,574
1973 Average	11,428	20,895	18,656	31,015	59,300
1974 Average	10,978	21,550	18,399	30,762	59,391
1975 Average	10,505	19,223	16,831	27,218	56,511
1976 Average	10,251	21,847	19,563	30,841	61,121
1977 Average	10,437	22,098	20,372	31,443	63,665
1978 Average	10,820	21,067	19,819	30,120	64,225
1979 Average	10,707	21,569	22,575	31,300	66,973
1980 Average	10,809	18,541	20,715	27,419	R64,152
1981 Average	10,739	15,894	17,619	23,393	R60,761
1982 Average	10,783	12,815	13,786	19,702	R58,225
1983 Average	10,788	11,676	12,416	18,352	R58,054
1984 Average	11,107	11,433	12,619	18,389	R59,644
1985 Average	11,192	10,320	11,498	17,151	R59,262
1986 Average	10,905	12,441	13,653	19,310	R61,769
1987 Average	10,648	12,869	13,992	19,589	R62,427
1988 Average	10,473	14,310	15,662	21,465	R64,705
1989 Average	9,880	15,733	16,658	23,323	R65,892
1990 Average	9,677	16,249	17,232	24,536	R66,754
1991 Average	9,883	15,704	16,747	24,625	R66,632
1992 Average	9,768	17,010	17,871	25,818	R66,960
1993 Average	9,602	17,792	18,505	26,610	R67,361
1994 Average	9,413	18,072	18,745	27,031	R68,250
1995 Average	9,400	R18,351	R19,069	R27,566	R69,860
1996 Average	9,445	R18,486	R19,259	R28,321	R71,764
1997 Average P	9,416	19,641	20,407	29,905	74,031

 $<sup>\</sup>underline{1}/$  U.S. geographic coverage is the 50 States and the District of Columbia.  $\underline{2}/$  See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups.

P=Preliminary. R=Revised data.

Note: Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B.

Table 4.5 Oil Stocks in OECD Countries, End of Year (Million Barrels)

		France	Italy	Germany <u>1</u> /	United Kingdom	OECD Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan	Other <u>4</u> /	Total OECD
L973	December	201	152	181	156	1,070	1,008	140	303	67	2,588
L974	December	249	167	213	191	1,227	1,074	145	370	64	2,880
L975	December	225	143	187	165	1,154	1,133	174	375	67	2,903
L976	December	234	143	208	165	1,205	1,112	153	380	68	2,918
L977	December	239	161	225	148	1,268	1,312	167	409	68	3,224
L978	December	201	154	238	157	1,219	1,278	144	413	68	3,122
.979	December	226	163	272	169	1,353	1,341	150	460	75	3,379
980	December	243	170	319	168	1,464	1,392	164	495	72	3,587
981	December	214	167	297	143	1,337	1,484	161	482	67	3,531
982	December	193	179	272	125	1,258	1,430	136	484	68	3,376
.983	December	153	149	249	118	1,142	1,454	121	470	68	3,255
.984	December	152	159	239	112	1,130	1,556	128	479	69	3,362
.985	December	139	157	233	123	1,092	1,519	113	494	66	3,284
L986	December	127	155	252	124	1,133	1,593	111	509	72	3,418
.987	December	127	169	259	121	1,130	1,607	126	540	71	3,474
.988	December	140	155	266	112	1,118	1,597	116	538	71	3,440
<b>.</b> 989	December	138	164	271	118	1,133	1,581	114	577	71	3,476
<b>.</b> 990	December	140	172	265	112	1,163	1,621	121	590	73	3,568
.991	December	153	160	288	119	1,181	1,617	119	606	65	3,588
.992	December	146	174	310	113	1,219	1,592	107	603	67	3,588
.993	December	158	163	309	118	1,221	1,647	105	618	69	3,661
.994	December	158	164	312	115	1,240	1,653	119	645	69	3,726
.995	December	159	162	301	107	1,228	1,563	109	630	71	3,601
L996	December P	158	152	300	108	1,256	1,507	103	651	74	3,591

 $\overline{P}$ =Preliminary.

Note: Oil Stocks - See Explanatory Note 2 in Appendix B.

<sup>1/</sup> Data through December 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unlified Germany, i.e., the former East Germany and West Germany.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported. Using the new basis, the end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and the U.S. Territories.

Table 4.6 World Oil Demand, 1970-1996 (Thousand Barrels per Day)

									E:	OECD xcluding	1	OECD	
Fı	rance	Italy	Germany <u>1</u> /	United Kingdom	OECD Europe <u>2</u> /	United States <u>3</u> /	Canada	Japan		East Germany	East Germany	East Germany	World Total
.970 Average 1	1,937	1,710	2,607	2,096	12,404	14,697	1,516	3,817	836	33,270	223	33,493	46,808
971 Average 2	•	1,838	2,702	2,141	13,005	15,213	1,565	4,142	831	34,755	238	34,993	49,416
972 Average 2		1,947	2,859	2,284	13,934	16,367	1,664	4,363	948	37,275	270	37,545	53,09
973 Average 2		2,068	3,055	2,341	14,925	17,308	1,729	4,949	988	39,900	282	40,182	57,23
974 Average 2		2,004	2,748	2,210	13,988	16,653	1,779	4,864	1,095	38,379	307	38,686	56,67
975 Average 2		1,855	2,650	1,911	13,217	16,322	1,779	4,621	1,041	36,980	307	37,287	56,19
976 Average 2	2,420	1,971	2,877	1,892	14,124	17,461	1,818	4,837	1,119	39,358	329	39,687	59,67
977 Average 2	2,294	1,897	2,865	1,905	13,916	18,431	1,850	4,880	1,160	40,237	347	40,584	61,82
978 Average 2	2,408	1,952	2,927	1,938	14,290	18,847	1,902	4,945	1,204	41,187	363	41,550	64,15
979 Average 2	2,463	2,039	3,003	1,971	14,667	18,513	1,971	5,050	1,178	41,379	369	41,748	65,22
980 Average 2	2,256	1,934	2,707	1,725	13,634	17,056	1,873	4,960	1,072	38,595	375	38,970	63,06
981 Average 2	-	1,874	2,449	1,590	12,515	16,058	1,768	4,848	1,080	36,269	355	36,624	60,90
.982 Average 1	1,880	1,781	2,372	1,590	12,053	15,296	1,578	4,582	1,008	34,517	371	34,888	59,50
.983 Average 1		1,750	2,324	1,531	11,765	15,231	1,448	4,395	954	33,793	336	34,129	58,74
.984 Average 1		1,646	2,322	1,849	11,736	15,726	1,472	4,576	989	34,500	340	34,840	59,83
.985 Average 1	-	1,717	2,338	1,634	11,681	15,726	1,504	4,384	976	34,271	362	34,633	60,09
.986 Average 1	-	1,738	2,498	1,649	12,102	16,281	1,506	4,439	951	35,279	362	35,641	61,75
.987 Average 1	-	1,855	2,424	1,603	12,255	16,665	1,548	4,484	959	35,911	342	36,253	62,99
.988 Average 1	-	1,836	2,422	1,697	12,427	17,283	1,693	4,752	939	37,093	322	37,415	64,81
.989 Average 1	-	1,930	2,280	1,738	12,531	17,325	1,733	4,983	998	37,570	301	37,871	65,91
.990 Average 1	-	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475	283	37,758	65,98
.991 Average 1	•	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056			38,067	66,57
992 Average 1		1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041			38,768	66,74
993 Average		1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118			38,967	67,04
994 Average 1		1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174			39,890	68,31
995 Average 1	-	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,227			40,537	70,19
996 Average P. 1	-	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,124			41,366	71,89

<sup>1/2</sup> Data through 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>4/ &</sup>quot;Other" consists of Australia, New Zealand, and the U.S. Territories.

P=Preliminary. --=Not Applicable.

Note: The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition.

Table 4.7 OECD Total Net Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
-						verage					
Total	17.670	18.008	18.706	20.082	20.456	20.414	20.783	21.226	21.133	20.717	21.45
United States1/	5.439	5.914	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498
Canada	391	358	585	462	425	479	546	586	623	756	803
OECD Europe2/	7.893	7.742	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.33
Main European Importe	ers										
France	1.682	1.742	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738
Germany3/	2.380	2.281	2.279	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.79
Italy	1.642	1.718	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.79
Netherlands	.632	.562	.646	.635	.677	.690	.713	.688	.720	.700	.76
Spain	.747	.803	.869	.952	.950	.951	.998	1.066	1.119	1.202	1.18
European Net Exporter	rs										
Norway	718	866	-1.036	-1.420	-1.543	-1.825	-2.102	-2.254	-2.586	-2.794	-3.15
United Kingdom	-1.067	-1.015	760	200	214	158	221	355	850	969	83
Smaller European Impo	orters										
Austria	.188	.194	.185	.191	.201	.212	.209	.205	.210	.194	.21
Belgium	.456	.443	.451	.454	.442	.506	.517	.503	.517	.495	.57
Denmark	.150	.122	.107	.078	.063	.048	.032	.023	.027	.039	.02
Ireland	.098	.081	.076	.079	.095	.094	.097	.102	.109	.116	.12
Finland	.229	.242	.200	.220	.208	.211	.188	.182	.234	.145	.18
Greece	.245	.230	.242	.252	.273	.297	.326	.327	.292	.343	.35
Iceland	.011	.013	.012	.011	.011	.012	.011	.014	.015	.015	.01
Luxembourg	.024	.028	.028	.031	.034	.039	.040	.039	.040	.036	.03
Portugal	.183	.199	.198	.246	.250	.258	.279	.272	.270	.291	. 27
Sweden	.379	.309	.313	.290	.324	.312	.320	.335	.362	.356	.40
Switzerland	.290	.254	.258	.254	.273	.273	.277	.250	.262	.248	.26
Turkey	.342	.402	.397	.384	.425	.366	.413	.500	.490	.569	.60
Japan	4.392	4.418	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.79
Other OECD	.338	.291	.250	.313	.270	.392	.467	.599	.580	.644	.63

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

<sup>•</sup>Data for 1995 are preliminary.

Table 4.8 OECD Imports from OPEC, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
-			-			Average					
Total	12.280	12.327	13.049	14.521	15.576	15.360	15.567	16.018	15.765	15.469	15.630
United States1/	2.724	2.988	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194
Canada	.158	.154	.161	.205	.199	.210	.210	.268	.285	.257	.261
OECD Europe2/	6.073	5.597	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053
Main European Importe	ers										
France	.882	.684	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897
Germany3/	.830	.675	.761	.739	.771	.859	.957	.948	.838	.711	.660
Italy	1.361	1.307	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244
Netherlands	.768	.767	.850	.892	.850	.900	.914	.982	.906	.791	.779
Spain	.584	.543	.604	.686	.652	.700	.632	.582	.668	.781	.775
European Net Exporter	s										
Norway	.008	.002	.002	.003	.007	.014	.004	.005	.003	.003	.001
United Kingdom	.324	.277	.322	.342	.406	.377	.390	.439	.306	.254	.234
Smaller European Impo	orters										
Austria	.090	.087	.082	.086	.097	.108	.115	.128	.119	.057	.023
Belgium	.288	.257	.302	.353	.313	.362	.359	.359	.284	.276	.284
Denmark	.025	.053	.067	.069	.044	.006	.001	.006	.008	.022	.027
Ireland	.001	.001	-	_	.000	.000	.000	.000	.000	.000	.000
Finland	.021	.023	.011	.013	.013	.029	.033	.007	.004	.004	.001
Greece	.273	.279	.233	.244	.340	.298	.346	.303	.266	.263	.280
Portugal	.120	.101	.118	.156	.166	.139	.152	.166	.227	.209	.177
Sweden	.086	.062	.074	.064	.073	.105	.116	.123	.126	.109	.091
Switzerland	.068	.069	.051	.021	.036	.052	.051	.063	.082	.083	.098
Turkey	.344	.411	.439	.384	.388	.365	.412	.452	.475	.477	.483
Japan	3.036	3.198	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470
Other OECD	.288	.389	.298	.355	.510	.478	.512	.609	.563	.612	.653

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

 $<sup>\</sup>overline{2}$ / "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development; OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Sources: See end of Section 4.

Table 4.9 OECD Imports from Persian Gulf, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
-						Average					
Imports from											
Persian Gulf											
Total	7.228	7.392	7.941	9.121	9.667	9.249	9.456	10.029	9.609	9.310	9.21
United States <u>1</u> /	.909	1.072	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.59
Canada	.054	.054	.056	.069	.081	.084	.092	.105	.119	.070	.11
OECD Europe2/	3.513	3.330	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.17
Main European Import	cers										
France	.586	.459	.484	.647	.864	.708	.640	.757	.651	.647	.57
Germany3/	.232	.187	.197	.216	.217	.227	.215	.250	.217	.172	.14
Italy	.817	.782	.643	.619	.626	.595	.573	.548	.430	.494	.50
Netherlands	.509	.516	.587	.663	.647	.609	.650	.744	.662	.563	.56
Spain	.328	.295	.306	.352	.291	.281	.231	.287	.275	.324	.30
European Net Exporte	ers										
Norway	.006	.002	_	-	.000	.011	.000	.000	.000	.000	.00
United Kingdom	.173	.164	.212	.240	.250	.222	.220	.303	.174	.135	.10
Smaller European Imp	porters										
Austria	.011	.026	.025	.022	.016	.021	.031	.036	.038	.035	.00
Belgium	.182	.162	.224	.277	.250	.279	.292	.291	.232	.252	.26
Denmark	.024	.047	.063	.067	.043	.004	.000	.002	.000	.000	.00
Finland	.021	.022	.011	.012	.011	.021	.023	.002	.002	.002	.00
Greece	.204	.211	.146	.181	.268	.219	.291	.253	.214	.223	.23
Portugal	.088	.069	.066	.085	.073	.067	.074	.050	.117	.107	.08
Sweden	.036	.029	.045	.043	.039	.064	.068	.088	.076	.068	.06
Switzerland	.008	.008	.007	.007	.007	.007	.007	.008	.012	.007	.00
Turkey	.289	.348	.411	.323	.307	.324	.349	.429	.405	.336	.32
Japan	2.557	2.637	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.02
Other OECD	.195	.299	.241	.267	.322	.300	.338	.381	.316	.334	.31

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

<sup>2/ &</sup>quot;OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.
•Data for 1995 are preliminary.

Table 4.10 United States--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	-					Average					
Total Net Imports	5.439	5.914	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498
Imports from OPEC1/	2.724	2.988	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194
Imports from Persian Gulf2/											
Total	.909	1.072	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594
Bahrain	.001	001	.000	001	001	001	002	002	002	003	002
Iran	.019	.098	.000	.000	.000	.032	.000	.000	.000	.000	.000
Iraq	.081	.083	.343	.449	.518	.000	.000	.000	.000	.000	.001
Kuwait	.068	.082	.092	.157	.086	.006	.051	.353	.312	.218	.236
U.A.E	.043	.059	.028	.027	.016	.001	.004	.009	.011	.004	003
Qatar	.013	.000	.000	.002	.004	.000	.001	.001	.000	.000	.000
Saudi Arabia	.685	.751	1.063	1.224	1.339	1.797	1.720	1.414	1.402	1.344	1.363
Imports from OPEC-Af:											
Total	.711	.830	.918	1.084	1.080	.956	.876	.956	.880	.859	.872
Algeria	.271	.295	.300	.269	.280	.253	.196	.220	.243	.234	.256
Libya	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria	.440	.535	.618	.815	.800	.703	.680	.736	.637	.625	.616
Imports from OPEC-South America											
Total	.788	.801	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667
Venezuela	.788	.801	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667
Imports from OPEC-Fa:	r East										
Total	.317	.284	.205	.182	.113	.106	.075	.074	.109	.087	.058
Indonesia	.317	.284	.205	.182	.113	.106	.075	.074	.109	.087	.058

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.11 Japan--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
-			-			Average					
Total Net Imports	4.392	4.418	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790
Imports from OPEC1/	3.036	3.198	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470
Imports from Persian Gulf2/											
Total	2.557	2.637	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025
Bahrain	.034	.037	.036	.042	.037	.037	.029	.025	.028	.029	.033
Iran	.220	.230	.187	.291	.385	.383	.362	.384	.459	.399	.451
Iraq	.164	.105	.173	.219	.146	.000	.000	.000	.000	.000	.000
Kuwait	.278	.347	.341	.458	.291	.014	.220	.368	.430	.501	.500
U.A.E	.890	.773	.822	.929	1.032	1.285	1.256	1.287	1.398	1.420	1.396
Qatar	.183	.139	.203	.250	.263	.285	.300	.330	.328	.335	.335
Saudi Arabia	.789	1.005	.930	.984	1.240	1.367	1.420	1.327	1.303	1.296	1.310
Imports from OPEC-Aft											
Total	.016	.023	.044	.015	.011	.011	.007	.008	.017	.026	.032
Algeria	.015	.023	.044	.015	.010	.010	.007	.008	.012	.011	.012
Libya	.001	-	-	-	<del>-</del>	- <del>-</del>	<del>-</del>	<del>-</del>	_		-
Nigeria	-	-	-	-	.001	.001	.000	.000	.005	.016	.020
Imports from OPEC-South America											
Total	.012	.012	.011	.011	.011	.010	.010	.009	.009	.002	.003
Venezuela	.012	.012	.011	.011	.011	.010	.010	.009	.009	.002	.003
Imports from OPEC-Far	r East										
Total	.486	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442
Indonesia	.486	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.12 OECD Europe--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
-	-		-	-		Average		-			
Total Net Imports	7.893	7.742	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339
Imports from OPEC1/ Imports from Persian Gulf2/	6.073	5.597	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053
Total	3.513	3.330	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171
Bahrain	.002	.001	.009	.005	.020	.002	.003	.004	.003	.000	.001
Iran	.511	.732	.850	1.076	1.190	1.132	1.113	1.253	1.074	1.149	1.059
Iraq	.717	.905	.959	.897	.591	.000	.000	.001	.000	.000	.006
Kuwait	.456	.469	.474	.452	.346	.019	.142	.461	.302	.269	.288
U.A.E	.164	.206	.134	.214	.446	.281	.199	.092	.067	.011	.004
Qatar	.054	.040	.021	.024	.026	.009	.006	.000	.000	.002	.002
Saudi Arabia	1.609	.978	.981	1.086	1.290	2.217	2.203	2.237	2.060	1.933	1.811
Imports from OPEC-Aft	rica										
Total	2.309	2.058	2.198	2.224	2.509	2.818	2.818	2.491	2.644	2.500	2.644
Algeria	.615	.627	.646	.648	.683	.757	.772	.693	.690	.724	.746
Libya	.967	.962	1.071	1.044	1.267	1.332	1.361	1.193	1.233	1.201	1.204
Nigeria	.727	.469	.481	.532	.559	.729	.686	.605	.721	.575	.694
Imports from OPEC-South America											
Total	.252	.208	.220	.212	.227	.249	.268	.240	.219	.273	.206
Venezuela	.252	.208	.220	.212	.227	.249	.268	.240	.219	.273	.206
Imports from OPEC-Far	r East										
Total	.002	.002	.005	.004	.008	.002	.009	.019	.019	.017	.033
Indonesia	.002	.002	.005	.004	.008	.002	.009	.019	.019	.017	.033

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

 $<sup>\</sup>overline{2}$ / The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.13 France--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
			-			Average					
Total Net Imports	1.682	1.742	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.73
Imports from OPEC <u>1</u> / Imports from Persian Gulf2/	.882	.684	.737	.875	1.101	1.021	.932	1.006	.956	.911	.89
Total	.586	.459	.484	.647	.864	.708	.640	.757	.651	.647	.57
Bahrain	.001	-	.007	.002	.011	.000	.001	.002	.000	.000	.00
Iran	.065	.088	.012	.158	.182	.171	.151	.243	.156	.208	.17
Iraq	.109	.151	.143	.128	.062	.000	.000	.000	.000	.000	.00
Kuwait	.023	.044	.017	.021	.015	.011	.029	.032	.016	.022	.01
U.A.E	.035	_	.017	.040	.233	.064	.033	.025	.003	.002	.00
Qatar	.030	.002	.017	.009	.022	.003	.002	.000	.000	.000	.00
Saudi Arabia	.324	.175	.271	.288	.339	.459	.424	.454	.477	.416	.38
Imports from OPEC-Af:	rica										
Total	.279	.212	.249	.218	.233	.296	.281	.242	.301	.262	.32
Algeria	.089	.072	.079	.089	.092	.107	.105	.066	.089	.103	.10
Libya	.061	.064	.090	.065	.079	.104	.087	.063	.059	.043	.05
Nigeria	.129	.076	.079	.064	.062	.084	.090	.112	.153	.115	.16
Imports from OPEC-South America											
Total	.019	.012	.011	.012	.015	.017	.011	.010	.003	.002	.00
Venezuela	.019	.012	.011	.012	.015	.017	.011	.010	.003	.002	.00
Imports from OPEC-Fa:	r East										
Total	.000	-	_	.000	.000	.001	.001	.000	.000	.000	.00
Indonesia	.000	_	_	.000	.000	.001	.001	.000	.000	.000	.00

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.14 Germany--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	-		-			Average					
Total Net Imports	2.380	2.281	2.279	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.79
Imports from OPEC1/ Imports from	.830	.675	.761	.739	.771	.859	.957	.948	.838	.711	.66
Persian Gulf <u>2</u> /	020	105	105	01.6	01.5	005	01.5	050	01.5	150	1.41
TotalBahrain	.232	.187	.197	.216	.217	.227	.215	.250 .000	.217 .001	.172 .000	.14
Iran	.041	.020	.051	.041	.055	.053	.021	.053	.040	.031	.01
Iraq	.016	.052	.032	.009	.004	.000	.000	.000	.000	.000	.00
Kuwait	.021	.017	.013	.022	.013	.000	.009	.022	.026	.015	.01
U.A.E	.004	.024	.006	.023	.013	.012	.002	.002	.001	.000	.000
Qatar	-004	.001	.001	.002	.003	.002	.001	.002	.000	.000	.000
Saudi Arabia	.151	.072	.095	.119	.125	.161	.182	.173	.149	.125	.11
Imports from OPEC-Af:		.072	.055	• 1 1 2	•125	• 101	.102	• = 7 3	.117	.125	•
Total	.484	.401	.472	.436	.465	.524	.614	.594	.543	.461	.46
Algeria	.137	.146	.141	.106	.098	.126	.183	.195	.161	.135	.12
Libya	.152	.160	.237	.235	.244	.262	.252	.244	.244	.234	.25
Nigeria	.195	.095	.095	.095	.123	.136	.179	.154	.139	.093	.07
Imports from OPEC-South America											
Total	.113	.086	.091	.086	.088	.107	.128	.105	.079	.078	.05
Venezuela	.113	.086	.091	.086	.088	.107	.128	.105	.079	.078	.05
Imports from OPEC-Fa	r East										
Total	.001	.002	_	_	.002	.000	.000	.000	.000	.000	.00
Indonesia	.001	.002	_	_	.002	.000	.000	.000	.000	.000	.000

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Data through 1990 are for the former West Germany. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.15 Italy--Net Oil Imports, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
						Average					
Total Net Imports	1.642	1.718	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.79
Imports from OPEC1/ Imports from Persian Gulf2/	1.361	1.307	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.24
Total	.817	.782	.643	.619	.626	.595	.573	.548	.430	.494	.50
Bahrain	.001	.000	-	.001	.000	.001	.001	.000	.000	.000	.00
Iran	.135	.141	.093	.124	.192	.231	.239	.221	.143	.233	.26
Iraq	.114	.167	.198	.138	.079	.000	.000	.000	.000	.000	.000
Kuwait	.147	.142	.118	.093	.063	.000	.007	.012	.001	.000	.000
U.A.E	.051	.109	.060	.085	.075	.044	.013	.002	.000	.000	.000
Qatar	.004	.029	.002	.008	.000	.004	.001	.000	.000	.002	.00
Saudi Arabia	.364	.194	.171	.171	.216	.315	.312	.313	.286	.260	.23
Imports from OPEC-Af:	rica										
Total	.505	.489	.516	.626	.740	.793	.757	.653	.660	.679	.71
Algeria	.087	.109	.108	.150	.155	.155	.140	.096	.099	.100	.11
Libya	.309	.342	.389	.430	.556	.581	.584	.542	.543	.562	.580
Nigeria	.110	.038	.019	.045	.029	.057	.034	.015	.018	.017	.02
Imports from OPEC-South America											
Total	.039	.037	.029	.014	.007	.004	.005	.002	.007	.014	.008
Venezuela	.039	.037	.029	.014	.007	.004	.005	.002	.007	.014	.008
Imports from OPEC-Fa:	r East										
Total	_	_	.002	.002	.003	.001	.009	.019	.019	.015	.02
Indonesia	_	_	.002	.002	.003	.001	.009	.019	.019	.015	.02

<sup>1/</sup> OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

<sup>2/</sup> The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.16 OECD Imports from Iraq, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
•						Average					
Total	0.964	1.103	1.489	1.581	1.276	0.000	0.000	0.001	0.000	0.000	0.007
United States1/	.081	.083	.343	.449	.518	.000	.000	.000	.000	.000	.001
Canada	-	.010	.001	.013	.011	.000	.000	.000	.000	.000	.000
OECD Europe2/	.717	.905	.959	.897	.591	.000	.000	.001	.000	.000	.006
Main European Import											
France	.109	.151	.143	.128	.062	.000	.000	.000	.000	.000	.000
Germany3/	.016	.052	.032	.009	.004	.000	.000	.000	.000	.000	.000
Italy	.114	.167	.198	.138	.079	.000	.000	.000	.000	.000	.000
Netherlands	.067	.034	.039	.101	.117	.000	.000	.000	.000	.000	.000
Spain	.117	.080	.092	.109	.063	.000	.000	.000	.000	.000	.002
European Net Exporte	rs										
United Kingdom	.071	.082	.070	.034	.027	.000	.000	.000	.000	.000	.000
Smaller European Impe	orters										
Austria	_	.015	.007	.000	.000	.000	.000	.001	.000	.000	.000
Belgium	.026	.049	.037	.047	.029	.000	.000	.000	.000	.000	.000
Denmark	_	.001	_	_	.000	.000	.000	.000	.000	.000	.000
Greece	.030	.065	.059	.052	.044	.000	.000	.000	.000	.000	.000
Portugal	.024	.019	.029	.024	.019	.000	.000	.000	.000	.000	.000
Sweden	_	.003	.003	.005	.000	.000	.000	.000	.000	.000	.000
Switzerland	-	.000	_	.000	.000	.000	.000	.000	.000	.000	.000
Turkey	.143	.188	.250	.250	.146	.000	.000	.000	.000	.000	.003
Japan	.164	.105	.173	.219	.146	.000	.000	.000	.000	.000	.000
Other OECD	.002	.000	.013	.003	.011	.000	.000	.000	.000	.000	.000

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

 $<sup>\</sup>overline{2}$ / "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

Table 4.17 OECD Imports from Kuwait, 1986-1996 (Million Barrels per Day)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996		
-													
Total	0.829	0.925	0.936	1.084	0.740	0.039	0.414	1.191	1.081	0.997	1.03		
United States1/	.068	.082	.092	.157	.086	.006	.051	.353	.312	.218	.23		
Canada	-	-	-	-	.004	_	-	.000	.027	.000	.00		
OECD Europe2/	.456	.469	.474	.452	.346	.019	.142	.461	.302	.269	.28		
Main European Import	ers												
France	.023	.044	.017	.021	.015	.011	.029	.032	.016	.022	.01		
Germany <u>3</u> /	.021	.017	.013	.022	.013	.000	.009	.022	.026	.015	.01		
Italy	.147	.142	.118	.093	.063	.000	.007	.012	.001	.000	.00		
Netherlands	.122	.150	.189	.194	.151	.002	.052	.254	.179	.176	.19		
Spain	.020	.015	.030	.015	.010	.003	.000	.015	.000	.000	.00		
European Net Exporte:	rs												
Norway	-	_	-	_	_	_	_	.000	.000	.000	.00		
United Kingdom	.014	.011	.006	.006	.045	.002	.027	.049	.058	.039	.03		
Smaller European Impo	orters												
Austria	_	-	.004	.002	.000	.000	.000	.000	.000	.000	.00		
Belgium	.006	.000	-	-	.000	.001	.006	.056	.005	.004	.01		
Denmark	.020	.045	.060	.066	.034	.000	.000	.000	.000	.000	.00		
Finland	-	-	-	-	-	.000	-	-	-	-			
Greece	.038	.030	.015	.009	.000	.000	.002	.005	.001	.000	.00		
Portugal	_	.001	.003	.003	.002	.000	.000	.000	.000	.000	.00		
Sweden	_	_	-	.001	.001	.000	.000	.002	.000	.000	.00		
Switzerland	_	_	-	-	_	.000	.000	.000	.000	.000	.00		
Turkey	.046	.013	.019	.019	.011	.000	.010	.016	.016	.014	.01		
Japan	.278	.347	.341	.458	.291	.014	.220	.368	.430	.501	.50		
Other OECD	.028	.026	.029	.017	.013	.000	.000	.009	.011	.009	.01		

<sup>1/</sup> U.S. geographic coverage is the 50 States and District of Columbia.

 $<sup>\</sup>overline{2}$ / "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.
•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1995 are preliminary.

### **Sources for Section 4 (Historical Oil Data)**

Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: • Energy Information Administration (EIA), <u>Petroleum Supply Annual 1996</u>; • Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, various issues.

Other Countries: • EIA, International Energy Annual, various issues. • EIA, International Petroleum Annual, 1978. • United Nations, Yearbook of World Energy Statistics, 1979. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, October 1986.

#### Oil Stocks

United States: EIA, Petroleum Supply Annual 1996.

Other OECD Countries: • 1973-1982: Organization for Economic Cooperation and Development (OECD), <u>Quarterly Oil Statistics and Energy Balances</u>, various issues. • 1983-1997: OECD, Monthly Oil Statistics in the EIA, International Energy Database.

#### Oil Demand

United States: EIA, Petroleum Supply Annual 1996.

Other OECD Countries: • 1973-1981: OECD, <u>Quarterly Oil Statistics and Energy Balances</u>, various issues. • OECD, Annual Oil Statistics data base, 1970-1979. • 1982-1997: OECD, Monthly Oil Statistics in the EIA International Energy Database.

#### Oil Imports

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1996.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), <u>Quarterly Oil Statistics and Energy</u> Balances, various issues. • OECD Monthly Oil Statistics database, 1991-1997.

Appendix A

Organizational and Geographical Definitions

# Appendix A. Organizational and Geographical Definitions

International Energy Agency (IEA) countries are: Australia, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

Organization for Economic Cooperation and Development (OECD) countries are: Australia, Australia, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Total OECD includes the United States Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). Total OECD excludes data for Czech Republic, Hungary, Mexico, Poland, and South Korea which are not yet available.

**OECD Europe** countries are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, and United Kingdom. OECD Europe excludes data for Czech Republic, Hungary, and Poland which are not yet available.

**Organization of Petroleum Exporting Countries (OPEC)** members are: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. As of December 31, 1992, Ecuador withdrew its membership in OPEC, and as of December 31, 1994, Gabon withdrew its membership. For consistency, Ecuador and Gabon are excluded in the historical series of OPEC totals.

Arab members of OPEC are: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia and the United Arab Emirates.

**Organization of Arab Petroleum Exporting Countries (OAPEC)** are: Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Neutral Zone, Qatar, Saudi Arabia, Syria, Tunisia, and the United Arab Emirates. In April 1979 Egypt was suspended from OAPEC membership. In May 1989 Egypt rejoined OAPEC. For consistency, Egypt is included in the historical series of the OAPEC totals.

Persian (Arabian) Gulf countries are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

The term "Former USSR" is being used in the <u>International Petroleum Statistics Report</u> as a purely geographical expression, referring to the Commonwealth of Independent States (CIS), Georgia, and the three Baltic States (Estonia, Latvia, and Lithuania).

Appendix B

Explanatory Notes

# **Appendix B. Explanatory Notes**

### Note 1: World Oil Supply

Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gain, alcohol, and liquids produced from coal and other sources. Beginning in 1993, U.S. data includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

#### Note 2: Oil Stocks

The International Energy Agency (IEA) assembles and reports total oil stock data for the member countries of the Organization for Economic Cooperation and Development (OECD). Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. In its report titled Quarterly Oil Statistics and Energy Balances of OECD Countries, the IEA defines oil stocks as follows: "All non-military stocks held by importers (including all final consumers directly), refiners, Governments, major non-importing final consumers eligible under IEA/OECD commitments and by foreign entities in the following facilities: bulk terminals, refinery tanks, pipeline tankage, barges, intercoastal tankers (when port of departure and destination are in the reporting country), tankers in port (to the extent that their cargo is to be unloaded in the reporting country), and inland ship bunkers. Oil is reported regardless of the ownership of such storage facilities." IEA data exclude "oil held in pipelines, rail and truck tank cars, sea-going ships' bunkers, service stations, retail stores and tankers at sea." Also the IEA defines the United States to be the 50 States and the District of Columbia, and the U.S. Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). The Energy Information Administration (EIA) does not include the United States Territories in its statistical definition of the United States. Further, the EIA includes oil in oil pipelines as part of its stock data. Tables 1.5, 1.6, 2.3, and 4.4 include oil stocks for the United States according to EIA definitions. Using IEA definitions, at the end of September 1997 United States (including territories) oil stocks totaled 1,450 million barrels.

### Note 3: A Change to the Oil Balance in Section 2.

Prior to August 1992, Section 2 of the International Petroleum Statistics Report presented a balance of oil supply, demand, and stock change for the Market Economies, at quarterly time intervals. The communist countries, or Centrally Planned Economies (CPEs) were not included in the balance, mainly because good quarterly data for oil demand in these countries were not available. Net imports from the CPEs were included in the balance as part of total Market Economies supply. At present, the former Soviet Union and most of the countries of Eastern Europe are in transition from communism to market economies; because of this there are no longer good political or economic reasons to publish an oil balance only for the countries that have traditionally been market economies. Beginning with the August 1992 edition, Section 2 of the International Petroleum Statistics Report was changed from a Market Economies oil balance to a world oil balance.

The main data issues related to this change may be summarized as follows:

Supply Data. Monthly oil supply data are available for all countries of the world. These data are used to generate Tables 1.1 to 1.4; they were used to expand the Section 2 supply table (Table 2.2) to the whole world.

<u>Demand Data</u>. EIA has now developed quarterly figures for world oil demand, including demand in the former CPEs; these are published in Table 4 of EIA's <u>Short-Term Energy Outlook</u>. The procedures involved in developing quarterly world demand numbers may be summarized as follows:

Complete monthly data are available for the 24 OECD countries. Annual demand data for all countries (about 200 countries) are presented in EIA's <u>International Energy Annual</u>. In 1993, the OECD accounted for about three-fifths of total world demand, the 25 largest consumers outside of the OECD accounted for about one-third of the world total, and the remaining countries (about 150 countries) accounted for less than one-tenth of the total. The key problem, therefore, is to develop good figures for the 25 largest consumers outside the OECD.

Of these 25 countries, by far the largest consumer is Russia, which in 1993 accounted for about one-sixth of the demand in the group of 25. The next largest consumer is China, which in 1993 accounted for about one-seventh of the demand in the group. Thus in 1993 Russia and China accounted for one-third of the demand in the group of 25. For these 2 countries, data are available on oil production and net exports. The demand numbers shown in Section 2 are computed as production minus net exports. This is the same procedure used in the EIA Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other respected publications that deal with international oil markets. Note, however, that this method of computing demand ignores both refinery gain and stock changes.

For other major consuming countries outside of the OECD, quarterly demand data are developed based upon the latest available annual data, analytic judgment about current trends, and some seasonal adjustments. These are the same procedures used for the <a href="Short-Term Energy Outlook">Short-Term Energy Outlook</a>.

<u>Stocks Data.</u> Reliable stocks data are available for the OECD countries. Estimates of stocks for export and afloat, and of commercial floating stocks, are available. (See sources at the end of Section 2.)

For on-land stocks outside the OECD, there is little reliable data. Most estimates of on-land stocks outside the OECD are based on the theory that stocks are approximately equal to some number of days of demand. Demand figures (which themselves involve some degree of estimation) are then used to compute estimates of stock levels.

In the <u>International Petroleum Statistics Report</u>, it had been the practice for some time to estimate that on-land stocks in the traditional market economies outside of the OECD were equal to 55 days of demand. This was acceptable, mainly because the rule was used only to estimate a relatively small part of total stocks (about 16 percent).

When Section 2 was converted from a Market Economies oil balance to a world oil balance, there were important changes in the conditions that made it reasonable to estimate on-land stocks outside of the OECD using the rule of 55 days of demand. When the CPEs are included, the stocks that must be estimated are a considerably larger part of the total. In 1990, total oil demand in the former CPEs was more than 80 percent as large as demand in all of the non-OECD traditional market economies. Thus the quantity of stocks that would have to be estimated using a 55-day rule would nearly double, and the estimated components of stock levels and stock changes would become relatively large parts of the total. One consequence of this is that the statistical discrepancy (as shown in Table 2.1) would become less useful as an indicator of the overall consistency of the data. The statistical discrepancy is computed from supply, demand, and stock change. If a large part of the stock change is estimated, then the statistical discrepancy loses much of its significance.

As already noted, quarterly demands in the former Soviet Union and in China are computed as production minus net exports. This computation implicitly assumes a zero stock change. Demand in the former Soviet Union is falling. If we were to use a 55-day rule to compute stock levels, falling demand would imply falling stock levels. This would contradict the assumption of zero stock change which was used in computing demand.

In view of all this, the following approach has been adopted. Table 2.3 now shows levels of stocks for the OECD countries, levels of stocks for export and afloat, and levels of commercial floating storage. Stock changes based on these stock levels are shown in Table 2.1. At this time, no other stock levels are shown. Table 2.1 now has a single line labelled "Other Stock Draw and Statistical Discrepancy", which contains the computed values needed to make the table balance.

It may become possible in the future to obtain reliable information on certain categories of on-land stocks outside the OECD. If such data become available, they will be added to Table 2.3, and the corresponding stock change information will be added to Table 2.1.

Changes in Formats and Sign Conventions. There were several changes in Section 2 to make the International Petroleum Statistics Report more consistent with other EIA publications, especially with the Short-Term Energy Outlook. The numbers were changed from 1 decimal place to 2 decimal places. The word "consumption", as used before August 1992, was changed to "demand". The sign convention for stock changes in Table 2.1 was changed. Stock draws are now indicated by positive numbers, and stock additions are indicated by negative numbers. Table 2.1 also uses a new sign convention for the line labelled "Other Stock Draw and Statistical Discrepancy". The values in this line are now computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw. This is the reverse of the sign convention used before August 1992.

<u>Summary</u>. Section 2 was expanded from a Market Economies oil balance to a world oil balance. Supply data are tracked for all producing countries. Demand data are tracked for the 24 OECD countries, and for 25 large consumers outside of the OECD. Demand for the remaining countries (less than 10 percent of total demand) is estimated, for years that are not yet available in the <u>International Energy Annual</u>. The stock levels in these tables are based on reported data for the OECD and for stocks at sea. The line in Table 2.1 labelled "Other Stock Draw and Statistical Discrepancy" is a balancing item.

Appendix C Glossary

# Appendix C. Glossary

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The molecules in the series vary in chain length and are composed of a hydrocarbon plus a hydroxyl group. Alcohol includes methanol and ethanol.

**Demand (Consumption/Petroleum Products Supplied).** Total petroleum products supplied is the sum of all petroleum products supplied. For each product, the amount supplied is calculated by summing production, crude oil burned directly, imports, and net withdrawals from primary stocks and subtracting exports.

**Crude Oil.** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Crude oil production is measured at the wellhead and includes lease condensate.

Government-Owned Stocks. Oil stocks owned by the national government and held for national security. In the United States these stocks are known as the Strategic Petroleum Reserve.

**Lease Condensate.** A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons (also called field condensate).

**Natural Gas Plant Liquids.** Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators. Products obtained include ethane, liquefied petroleum gases, (propanes, butane, propane-butane mixtures, and ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and other minor quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

**Oil Stocks.** Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. See Explanatory Note 2.

**Other Hydrocarbons.** Other materials processed at refineries. Includes coal tar derivatives, hydrogen, gilsonite, and natural gas received by the refinery for reforming into hydrogen.

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. They include: Fuel Ethanol, Methanol, and MTBE (Methyl tertiary butyl ether).

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt road oil, still gas, and other miscellaneous products.

**Processing Gain.** The amount by which the total volume of refinery output is greater than the volume of input for given period of time. The processing gain arises when crude oil and other hydrocarbons are processed into products that are, on average, less dense than the input.

**Processing Loss.** The amount by which the total volume of refinery output is less than the volume of input for given period of time. The processing loss arises when crude oil and other hydrocarbons are processed into products that are, on average, more dense than the input.

Appendix D

**Estimation Procedures** 

## **Appendix D. Estimation Procedures**

Estimation procedures are used for demand numbers in many of the countries outside of the OECD, in cases where data from EIA's International Energy Annual are not yet available. Demand numbers for 1995 and earlier years, for all countries, may be found in EIA's International Energy Annual 1995, published in December 1996, which is the most recent published edition of the International Energy Annual. EIA's WORLD ENERGY database contains final demand data for all countries of the world for 1994, and preliminary demand data for all countries for 1995. Instructions for downloading this database may be found on EIA's home page (http://www.eia.doe.gov/emeu/world/contents.html). The status of the demand numbers shown in Section 2 of this current International Petroleum Statistics Report may be summarized as follows.

The OECD demand numbers are, as usual, based on the latest Quarterly Oil Statistics and Monthly Oil Statistics tapes from the International Energy Agency.

For countries outside of the OECD, the following approach is used. The numbers for 1994 and earlier years match the demand numbers in the WORLD ENERGY database on EIA's home page. Numbers for 1995 forward are the best available EIA estimates, based upon the best annual data currently available, analytic judgment about current trends, and some seasonal adjustments. These are the same numbers that appear in the international oil balance table in EIA's <a href="Schort-Term Energy Outlook">Schort-Term Energy Outlook</a>.

The two largest non-OECD oil consumers are the former Soviet Union and China. For these two countries, published data are available on production and net exports. Demand is computed as production minus net exports. This is the same approach used in the Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other major publications dealing with international oil data. Note, however, that because of this computation, the demand numbers for the former Soviet Union and China implicitly exclude stock draw and refinery gain.

Appendix E

Conversions

### **Table E1. Refined Petroleum Products Conversion Factors**

Product	Barrels per Metric Ton
A surb alk	606
Asphalt	
Distillate Fuel Oil	
Gasoline, Aviation	
Gasoline, Motor	
Greases	
Jet Fuel, Kerosene-type	
Jet Fuel, Naptha-type	
Kerosene	
Liquefied Petroleum Gas (LPG)	
Lubricants	
Miscellaneous Products	
Naphthas	
Natural Gas Liquids (NGL)	
Natural Gasoline	
Paraffin Oil	
Paraffin Wax	
Petrolatum	
Petroleum Coke	
Residual Fuel Oil	
White Spirits	
wine Spins	

Table E2. Barrels of Crude Oil per Metric Ton, 1986-1995

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
North America										
Canada	7.453	7.453	7.453	7.453	7.186	7.186	7.186	7.186	7.186	7.18
Mexico	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.96
United States	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.33
Central & South America										
Argentina	7.149	7.149	7.149	7.149	7.120	7.120	7.120	7.120	7.120	7.12
Bolivia	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.88
Brazil	7.268	7.268	7.268	7.268	7.056	7.056	7.056	7.056	7.056	7.05
Chile	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.50
Colombia	7.084	7.084	7.084	7.084	7.080	7.080	7.080	7.080	7.080	7.08
Cuba	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.44
Ecuador	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.13
Peru	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.40
Trinidad and Tobago	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.08
Venezuela	6.880	6.880	6.880	6.880	6.890	6.890	6.890	6.890	6.890	6.89
Western Europe										
Austria	7.082	7.082	7.082	7.082	7.200	7.200	7.200	7.200	7.200	7.20
Denmark	7.689	7.689	7.689	7.689	7.405	7.405	7.405	7.405	7.405	7.40
France	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.33
Germany						7.330	7.330	7.330	7.330	7.33
Germany, East	7.340	7.340	7.340	7.340	7.340					_
Germany, West	7.247	7.247	7.247	7.247	7.247					_
Greece	7.178	7.178	7.178	7.178	7.231	7.231	7.231	7.231	7.231	7.23
Italy	6.853	6.853	6.853	6.853	7.300	7.300	7.300	7.300	7.300	7.30
Netherlands	6.853	6.853	6.853	6.853	7.239	7.239	7.239	7.239	7.239	7.23
Norway	7.810	7.810	7.810	7.810	7.644	7.644	7.644	7.644	7.644	7.64
Spain	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.50
Sweden	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.24
Turkey	7.150	7.150	7.150	7.150	7.200	7.200	7.200	7.200	7.200	7.20
United Kingdom	7.466	7.466	7.466	7.466	7.523	7.523	7.523	7.523	7.523	7.52
Former Yugoslavia	7.418	7.418	7.418	7.418	7.418	7.418	7.525	7.525	7.525	7.52
Croatia	7.410	7.410	7.410	7.410	7.410	7.410	7.418	7.418	7.418	7.41
Serbia and Montenegro							7.418	7.418	7.418	7.41
Slovenia							7.410	7.418	7.418	7.41

<sup>-- =</sup> No Production of this form of energy.

Sources: International Energy Annual 1995. DOE/EIA-0219(95) (96/12) (December 1996).

Table E2. Barrels of Crude Oil per Metric Ton, 1986-1995 (continued)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Eastern Europe & Former U.S.S.R.										
Albania	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.59
Bulgaria	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.33
Former Czechoslovakia	6.780	6.780	6.780	6.780	6.780	6.780	6.780			_
Czech Republic								6.780	6.780	6.78
Slovakia								6.780	6.780	6.78
Hungary	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.69
Poland	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.41
Romania	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.50
Former U.S.S.R	7.270	7.270	7.270	7.270	7.270	7.270				-
Azerbaijan							7,270	7.270	7.270	7.27
Belarus							7.270	7.270	7.270	7.27
Georgia							7.270	7.270	7.270	7.27
Lithuania								7.270	7.270	7.2
Kazakstan							7.270	7.270	7.270	7.2
Kyrgyzstan							7.270	7.270	7.270	7.27
Russia							7.270	7.270	7.270	7.27
Tajikistan							7.270	7.270	7.270	7.27
Turkmenistan							7.270	7.270	7.270	7.27
Ukraine							7.270	7.270	7.270	7.27
Uzbekistan							7.270	7.270	7.270	7.27
							7.270	7.270	7.270	1.41
<b>Middle East</b> Bahrain	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.32
	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.32
	7.426	7.426	7.426	7.426	7.430	7.430	7.430	7.430	7.430	7.43
Iraq	7.426	7.426	7.426	7.446	7.430	7.430	7.430	7.430	7.430	7.24
Israel										
Jordan	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.19
Cuwait	7.245	7.245	7.245	7.245	7.250	7.250	7.250	7.250	7.250	7.2
man	7.332	7.332	7.332	7.332	7.330	7.330	7.330	7.330	7.330	7.3
Qatar	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.50
Saudi Arabia	7.268	7.268	7.268	7.268	7.323	7.323	7.323	7.323	7.323	7.32
Syria	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.83
United Arab Emirates	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.48
Yemen	7.627	7.636	7.632	7.632	7.631	7.631	7.631	7.631	7.631	7.63

<sup>-- =</sup> No Production of this form of energy.

Sources: International Energy Annual 1995. DOE/EIA-0219(95) (96/12) (December 1996).

Table E2. Barrels of Crude Oil per Metric Ton, 1986-1995 (continued)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Africa										
Algeria	7.936	7.936	7.936	7.936	8.130	8.130	8.130	8.130	8.130	8.13
ungola	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.40
Benin	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.87
lameroon	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.20
ongo	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.5
ote d'Ivoire (Ivory Coast)	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.2
gypt	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.2
quatorial Guinea						8.077	8.077	8.077	8.077	8.0
abon	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.3
hana	7.285						7.285	7.285	7.285	7.2
ibya	7.515	7.515	7.515	7.515	7.580	7.580	7.580	7.580	7.580	7.5
orocco	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.6
igeria	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.3
outh Africa							9.853	9.853	9.853	9.8
udan							7.452	7.452	7.452	7.4
unisia	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.6
aire	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.3
ar East & Oceania										
ustralia	7.855	7.855	7.855	7.855	7.868	7.868	7.868	7.868	7.868	7.8
angladesh	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.4
runei	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.3
urma	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.0
hina	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.3
ndia	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.6
ndonesia	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.5
apan	7.285	7.285	7.285	7.285	7.357	7.357	7.357	7.357	7.357	7.3
alaysia	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.6
ew Zealand	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.1
akistan	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.5
apua New Guinea						7.809	7.809	7.809	7.809	7.8
hilippines	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.2
aiwan	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.5
hailand	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.7
	0.,55	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.0

<sup>-- =</sup> No Production of this form of energy.

Sources: International Energy Annual 1995. DOE/EIA-0219(95) (96/12) (December 1996).